

Changes on CRAN

2015-06-01 to 2015-11-30

by Kurt Hornik and Achim Zeileis

New packages in CRAN task views

Bayesian `eco`, `rstan`.

ChemPhys `compositions`.

ClinicalTrials `samplesize`.

Cluster `BayesLCA`, `NbClust`, `dbscan`, `longclust`.

Distributions `BivarP`, `CompGLM`, `Compounding`, `DiscreteLaplace`, `DiscreteWeibull`, `EMMIXskew`, `ExtDist`, `FMStable`, `GIGrvg`, `GenBinomApps`, `GenOrd`, `HAC`, `JohnsonDistribution`, `LIHNPSD`, `MM`, `MitISEM`, `MixedTS`, `NormalLaplace`, `ORDER2PARENT`, `OrdNor`, `PerMallows`, `SCI`, `TTmoment`, `csn`, `degreenet`, `dirmult`, `disclap`, `emg`, `fpow`, `frmqa`, `gambin`, `gb`, `gldist`, `kolmim`, `logitnorm`, `minimax`, `mnormpow`, `mvprpb`, `nCDunnett`, `polyaAepli`, `powerLaw`, `qmap`, `rtdists`, `sfsmisc`, `skellam`, `symmoments`, `vines`.

Econometrics `gets`, `midasr`, `sfa`, `spfrontier`, `ssfa`.

Environmetrics `eco`, `mra`.

ExperimentalDesign `ALTopt`, `Crossover`, `EngrExpt`, `LDOD`, `MAMS`, `MaxPro`, `OPDOE`, `OptGS`, `OptInterim`, `PopED`, `VdgRsm`, `agridat`, `bcrm`, `blockTools`, `blocksdesign`, `daewr`, `designGG`, `geospt`, `oapackage`, `pipe.design`, `rodd`, `simrel`, `sp23design`, `tox-testD`.

Finance `FatTailsR`, `PortRisk`, `Rblpapi`, `covmat`, `credule`.

HighPerformanceComputing `flowr`, `future`, `partDSA`, `toaster`.

MachineLearning `FCNN4R`, `Rborist`, `ranger`.

MetaAnalysis `MetaPath`, `RcmdrPlugin.RMTCJags`, `etma`, `joint.Cox`, `meta4diag`, `metaSEM`, `metagear`, `xmeta`.

Multivariate `cwhmisc`, `delt`, `knncat`.

NaturalLanguageProcessing `stringi`, `textreuse`.

NumericalMathematics `Pade`, `lamW`, `mvQuad`.

OfficialStatistics `hot.deck`, `mipfp`.

Optimization `ECOSolveR`, `NlcOptim`, `Rdsdp`, `bvls`, `copulaedas`, `kofnGA`, `lbfgsb3`, `matchingR`, `nls2`, `nnls`, `onls`, `qap`, `tabuSearch`.

Phylogenetics `SigTree`, `markophylo`, `pmc`.

Psychometrics `OpenMx`, `pwrRasch`.

ReproducibleResearch `paperR`.

SocialSciences `Amelia`, `MCMCglmm*`, `PAFit`, `PSAgraphics`, `RSiena`, `VGAM*`, `VIM`, `arm`, `betareg`, `biglm`, `catspec`, `demography`, `dispmod`, `elrm`, `ergm`, `influence.ME`, `logistf`, `logmult`, `lsmeans*`, `mi*`, `mlogit`, `multgee`, `multiplex`, `nlstools`, `norm`, `np`, `simpleboot`, `statnet`, `visreg`.

Spatial OasisR, rgrass7, spBayesSurv, spatsurv, tmap.

SpatioTemporal STMedianPolish, ctmcmove, ctmm, moveHMM, rsatscan.

Survival dynpred, glrt, parfm, survJamda.

TimeSeries EMD, LSTS, PCA4TS, Rlibeemd, TSMining, Wats, ZIM, autovarCore, bentcableAR, changepoint, dtwclust, ecp, fanplot, hht, imputeTS, jmotif, mlVAR, spectral.methods, tseriesEntropy, wbsts.

WebTechnologies RSocrata, bigml, googlePublicData, htmltab, pxweb, rsnp.

gR BDgraph, FBFsearch, huge, ndtv, networkDynamic.

(* = core package)

New contributed packages

ACDm Tools for Autoregressive Conditional Duration Models. Author: Markus Belfrage.

ACSNMineR Gene Enrichment Analysis from ACSN Maps or Gmt Files. Authors: Paul Deveau [aut, cre], Eric Bonnet [aut].

ACSWR A Companion Package for the Book “A Course in Statistics with R”. Author: Prabhanjan Tattar.

AF Model-Based Estimation of Confounder-Adjusted Attributable Fractions. Authors: Elisabeth Dahlqwist and Arvid Sjolander.

AFM Atomic Force Microscope Image Analysis. Authors: Mathieu Beauvais [aut, cre], Irma Liascukiene [aut], Jessem Landoulsi [aut].

AHR Estimation and Testing of Average Hazard Ratios. Author: Matthias Brueckner.

ANOM Analysis of Means. Author: Philip Pallmann.

APSIM General Utility Functions for the ‘Agricultural Production Systems Simulator’. Author: Justin Fainges.

ART Aligned Rank Transform for Nonparametric Factorial Analysis. Author: Pablo J. Villacorta.

AdaptGauss Gaussian Mixture Models (GMM). Authors: Michael Thrun, Onno Hansen-Goos, Rabea Griese, Catharina Lippmann, Jorn Lotsch, Alfred Ultsch.

AggregateR Aggregate Numeric, Date and Categorical Variables by an ID. Authors: Matthias Bogaert, Michel Ballings, Dirk Van den Poel.

AlgebraicHaploPackage Haplotype Two Snips Out of a Paired Group of Patients. Author: Jan Wolfertz.

ArgumentCheck Improved Communication to Users with Respect to Problems in Function Arguments. Author: Benjamin Nutter.

AssocTests Genetic Association Studies. Authors: Lin Wang [aut], Wei Zhang [aut], Qizhai Li [aut], Weicheng Zhu [ctb].

AutoModel Automated Hierarchical Multiple Regression with Assumptions Checking. Author: Alex Lishinski.

AutoregressionMDE Minimum Distance Estimation in Autoregressive Model. Author: Jiwoong Kim.

- AzureML** Discover, Publish and Consume Web Services on Microsoft Azure Machine Learning. Authors: Raymond Laghaeian [aut, cre], Brianna Gerads [aut], Ritika Ravichandra [aut], Alex Wang [aut].
- BCEE** The Bayesian Causal Effect Estimation Algorithm. Authors: Denis Talbot, Geneviève Lefebvre, Juli Atherton.
- BEDMatrix** Matrices Backed by Binary PED Files (PLINK). Authors: Alexander Grueneberg [aut, cre], Lian Lian [ctb], Gustavo de los Campos [ctb].
- BIGDAWG** Case-Control Analysis of Multi-Allelic Loci. Authors: Derek Pappas, Steve Mack, Jill Hollenbach.
- BTLasso** Modelling Heterogeneity in Paired Comparison Data. Author: Gunther Schauburger.
- Bagidis** Bases Giving DIStances. Author: Catherine Timmermans.
- BayesBD** Bayesian Boundary Detection in Images. Author: Meng Li.
- BayesMAMS** Designing Bayesian Multi-Arm Multi-Stage Studies. Authors: Philip Pallmann, Amanda Turner.
- BiTrinA** Binarization and Trinarization of One-Dimensional Data. Authors: Stefan Mundus, Christoph Müssel, Florian Schmid, Ludwig Lausser, Tamara J. Blätte, Martin Hopfensitz, Hans A. Kestler.
- Biocomb** Feature Selection and Classification with the Embedded Validation Procedures for Biomedical Data Analysis. Authors: Natalia Novoselova, Junxi Wang, Frank Pessler, Frank Klawonn.
- Blossom** Statistical Comparisons with Distance-Function Based Permutation Tests. Authors: Marian Talbert, Jon Richards, Paul Mielke, and Brian Cade.
- CALF** Coarse Approximation Linear Function. Authors: Stephanie Lane [aut, cre], Clark Jeffries [aut], Diana Perkins [aut].
- CANSIM2R** Directly Extracts Complete CANSIM Data Tables. Author: Marco Lugo.
- COMBIA** Synergy/Antagonism Analyses of Drug Combinations. Author: Muhammad Kashif.
- CTTShiny** Classical Test Theory via Shiny. Authors: William Kyle Hamilton [aut, cre], Atsushi Mizumoto [aut].
- CUB** A Class of Mixture Models for Ordinal Data. Authors: Maria Iannario, Domenico Piccolo.
- CUSUMdesign** Compute Decision Interval and Average Run Length for CUSUM Charts. Authors: Douglas M. Hawkins, David H. Olwell, Boxiang Wang.
- Canopy** Accessing Intra-Tumor Heterogeneity and Tracking Longitudinal and Spatial Clonal Evolutionary History by Next-Generation Sequencing. Authors: Yuchao Jiang, Nancy R. Zhang.
- CensMixReg** Censored Linear Mixture Regression Models. Authors: Luis Benites Sanchez, Victor Hugo Lachos.
- ChannelAttribution** Markov Model for the Online Multi-Channel Attribution Problem. Author: Davide Altomare.
- CircOutlier** Detecting of Outliers in Circular Regression. Authors: Azade Ghazanfarihesari, Majid Sarmad.

- ClamR** Time Series Modeling for Climate Change Proxies. Author: Jonathan M. Lees.
- ClustGeo** Clustering of Observations with Geographical Constraints. Authors: Amaury Labenne, Marie Chavent, Vanessa Kuentz-Simonet and Jerome Saracco.
- ClusterStability** Assessment of Stability of Individual Objects or Clusters in Partitioning Solutions. Authors: Etienne Lord, Francois-Joseph Lapointe, and Vladimir Makarenkov.
- Combine** Game-Theoretic Probability Combination. Authors: Alaa Ali, Marta Padilla and David R. Bickel.
- CommT** Comparative Phylogeographic Analysis using the Community Tree Framework. Author: Michael Gruenstaedl.
- CompR** Paired Comparison Data Analysis. Author: Michel Semenu.
- CompareCausalNetworks** Interface to Diverse Estimation Methods of Causal Networks. Authors: Christina Heinze, Nicolai Meinshausen.
- ComplexAnalysis** Numerically Evaluate Integrals and Derivatives (also Higher Order) of Vector- And Complex-Valued Functions. Author: Char Leung.
- ConsRank** Compute the Median Ranking(s) According to the Kemeny's Axiomatic Approach. Authors: Antonio D'Ambrosio, Sonia Amodio.
- CopyNumber450kCancer** Baseline Correction for Copy Number Data from Cancer Samples. Author: Nour-al-dain Marzouka [aut, cre].
- CoxPlus** Cox Regression (Proportional Hazards Model) with Multiple Causes and Mixed Effects. Author: Jing Peng.
- CryptRndTest** Statistical Tests for Cryptographic Randomness. Author: Haydar Demirhan.
- D3M** Two Sample Test with Wasserstein Metric. Author: Yusuke Matsui & Teppei Shimamura.
- DCchoice** Analyzing Dichotomous Choice Contingent Valuation Data. Authors: Tomoaki Nakatani [aut, cph] (original developer), Hideo Aizaki [aut, cre] (code patches), Kazuo Sato [ctb] (theoretical part of the manual).
- DIFboost** Detection of Differential Item Functioning (DIF) in Rasch Models by Boosting Techniques. Author: Gunther Schaubberger.
- DJL** Distance Measure Based Judgment and Learning. Author: Dong-Joon Lim.
- DRIP** Discontinuous Regression and Image Processing. Author: Yicheng Kang.
- DT** A Wrapper of the JavaScript Library 'DataTables'. Authors: Yihui Xie [aut, cre], Joe Cheng [ctb], jQuery contributors [ctb, cph] (jQuery in `htmlwidgets/lib`), SpryMedia Limited [ctb, cph] (DataTables in `htmlwidgets/lib`), Brian Reavis [ctb, cph] (`selectize.js` in `htmlwidgets/lib`), Leon Gersen [ctb, cph] (`noUiSlider` in `htmlwidgets/lib`), Bartek Szopka [ctb, cph] (`jquery.highlight.js` in `htmlwidgets/lib`), RStudio Inc [cph]. In view: *ReproducibleResearch*.
- DTRlearn** Learning Algorithms for Dynamic Treatment Regimes. Authors: Ying Liu, Yuanjia Wang, Donglin Zeng.
- DYM** Did You Mean? Author: Kosei Abe.
- DataLoader** Import Multiple File Types. Authors: Srivenkatesh Gandhi, Kreshnaa Raam S Bethusamy.
- DiffusionRgqd** Inference and Analysis for Generalized Quadratic Diffusions. Authors: Etienne A.D. Pienaar [aut, cre], Melvin M. Varughese [ctb].

- Directional** Directional Statistics. Authors: Michail Tsagris, Giorgos Athineou.
- DynTxRegime** Methods for Estimating Dynamic Treatment Regimes. Authors: S. T. Holloway, E. B. Laber, K. A. Linn, B. Zhang, M. Davidian, and A. A. Tsiatis.
- ECOSolveR** Embedded Conic Solver in R. Authors: Anqi Fu [aut], Balasubramanian Narasimhan [aut, cre]. In view: *Optimization*.
- EDFIR** Estimating Discrimination Factors. Authors: Alex Bond and Robert Robere.
- EEM** Read and Preprocess Fluorescence Excitation-Emission Matrix (EEM) Data. Author: Vipavee Trivittayasil.
- EGRETCi** Exploration and Graphics for RivEr Trends (EGRET) Confidence Intervals. Authors: Robert Hirsch [aut], Laura DeCicco [aut, cre].
- ELMR** Extreme Machine Learning (ELM). Author: Alessio Petrozziello [aut, cre].
- EMbC** Expectation-Maximization Binary Clustering. Authors: Joan Garriga, John R.B. Palmer, Aitana Oltra, Frederic Bartumeus.
- EPGLM** Gaussian Approximation of Bayesian Binary Regression Models. Author: James Ridgway.
- ESKNN** Ensemble of Subset of K-Nearest Neighbours Classifiers for Classification and Class Membership Probability Estimation. Authors: Asma Gul, Aris Perperoglou, Zardad Khan, Osama Mahmoud, Werner Adler, Miftahuddin Miftahuddin, and Berthold Lausen.
- EditImputeCont** Simultaneous Edit-Imputation for Continuous Microdata. Authors: Quanli Wang, Hang J. Kim, Jerome P. Reiter, Lawrence H. Cox and Alan F. Karr.
- EloChoice** Preference Rating for Visual Stimuli Based on Elo Ratings. Author: Christof Neumann.
- EpiBayes** Implements Hierarchical Bayesian Models for Epidemiological Applications. Authors: Matthew Branan, Marta Remmenga, Lori Gustafson, Jennifer Hoeting.
- EstHer** Estimation of Heritability in High Dimensional Sparse Linear Mixed Models using Variable Selection. Authors: Anna Bonnet and Celine Levy-Leduc.
- EurosarcBayes** Bayesian Single Arm Sample Size Calculation Software. Author: Peter Dutton.
- ExplainPrediction** Explanation of Predictions for Classification and Regression Models. Author: Marko Robnik-Sikonja.
- FACTMLE** Maximum Likelihood Factor Analysis. Authors: Koulik Khamaru, Rahul Mazumder.
- FCGR** Fatigue Crack Growth in Reliability. Authors: Antonio Meneses, Salvador Naya, Javier Tarrío-Saavedra, Ignacio Lopez-Ullbarri.
- FCNN4R** Fast Compressed Neural Networks for R. Author: Grzegorz Klima. In view: *MachineLearning*.
- FENmlm** Fixed Effects Nonlinear Maximum Likelihood Models. Author: Laurent Berge.
- FIACH** Retrospective Noise Control for fMRI. Author: Tim Tierney.
- FSA** Functions for Simple Fisheries Stock Assessment Methods. Author: Derek Ogle [aut, cre].
- FSAdata** Data to Support Fish Stock Assessment (FSA) Package. Author: Derek Ogle [aut, cre].

- FastBandChol** Fast Estimation of a Covariance Matrix by Banding the Cholesky Factor. Author: Aaron Molstad.
- FastGP** Efficiently Using Gaussian Processes with Rcpp and RcppEigen. Authors: Giri Gopalan, Luke Bornn.
- FastKM** A Fast Multiple-Kernel Method Based on a Low-Rank Approximation. Authors: Rachel Marceau, Wenbin Lu, Michele M. Sale, Bradford B. Worrall, Stephen R. Williams, Fang-Chi Hsu, Jung-Ying Tzeng, and Shannon T. Holloway.
- Fgmutils** Forest Growth Model Utilities. Authors: Clayton Vieira Fraga, Ana Paula Simiqueli, Wagner Amorim da Silva Altoe.
- ForecastCombinations** Forecast Combinations. Author: Eran Raviv. In view: *TimeSeries*.
- FractalParameterEstimation** Estimation of Parameters p and q for Randomized Sierpinski Carpet for $[p-p-p-q]$ -Model. Author: Philipp Hermann.
- Fragman** Fragment Analysis in R. Authors: Giovanni Covarrubias-Pazaran, Luis Diaz-Garcia, Brandon Schlautman, Walter Salazar, Juan Zalapa.
- FuzzyLP** Fuzzy Linear Programming. Authors: Carlos A. Rabelo [aut, cre], Pablo J. Villacorta [ctb].
- GERGM** Estimation and Fit Diagnostics for Generalized Exponential Random Graph Models. Authors: Matthew J. Denny, James D. Wilson, Skyler Cranmer, Bruce A. Desmarais, Shankar Bhamidi.
- GFD** Tests for General Factorial Designs. Authors: Sarah Friedrich, Frank Konietzschke, Markus Pauly.
- GSSE** Genotype-Specific Survival Estimation. Authors: Baosheng Liang, Yuanjia Wang and Donglin Zeng.
- GenCAT** Genetic Class Association Testing (GenCAT). Authors: Eric Reed, Sara Nuñez, Jing Qian, Andrea Foulkes.
- GeneralOaxaca** Blinder-Oaxaca Decomposition for Generalized Linear Model. Authors: Aurelien Nicosia and Simon Baillargeon-Ladouceur.
- GeoBoxplot** Geographic Box Plot. Author: Ao Li.
- GiANT** Gene Set Uncertainty in Enrichment Analysis. Authors: Florian Schmid, Christoph Müssel, Johann M. Kraus, Hans A. Kestler.
- Goslate** Goslate Interface. Authors: Author: Florian Schwendinger [aut, cre], Kurt Hornik [cbt], Zhou Qiang [cph].
- Grace** Graph-Constrained Estimation and Hypothesis Testing. Author: Sen Zhao.
- GroupTest** Multiple Testing Procedure for Grouped Hypotheses. Author: Zhigen Zhao.
- GsymPoint** Estimation of the Generalized Symmetry Point, an Optimal Cutpoint in Continuous Diagnostic Tests. Authors: Mónica López-Ratón, Carmen Cadarso-Suárez, Elisa M. Molanes-López, Emilio Letón.
- HBglm** Hierarchical Bayesian Regression for GLMs. Authors: Asad Hasan, Alireza S. Mahani.
- HDGLM** Tests for High Dimensional Generalized Linear Models. Author: Bin Guo.
- HMDHFDplus** Read HMD and HFD Data from the Web. Authors: Tim Riffe, Carl Boe, Josh Goldstein.

- HRM** High-Dimensional Repeated Measures. Authors: Martin Happ [aut, cre], Harrar W. Solomon [aut], Arne C. Bathke [aut].
- Harvest.Tree** Harvest the Classification Tree. Author: Bingyuan Liu/Yan Yuan/Qian Shi.
- HiCfeat** Multiple Logistic Regression for 3D Chromatin Domain Border Analysis. Author: Raphael Mourad.
- HydeNet** Hybrid Bayesian Networks Using R and JAGS. Authors: Jarrod E. Dalton and Benjamin Nutter.
- ICBayes** Bayesian Semiparametric Models for Interval-Censored Data. Authors: Chun Pan, Bo Cai, Lianming Wang, and Xiaoyan Lin.
- ICC.Sample.Size** Calculation of Sample Size and Power for ICC. Authors: Alasdair Rathbone [aut, cre], Saurabh Shaw [aut], Dinesh Kumbhare [aut].
- IDTurtle** Identify Turtles by their Plastral Biometries. Author: Aitor Valdeon.
- IRISMustangMetrics** Statistics and Metrics for Seismic Data. Authors: Jonathan Callahan [aut, cre], Rob Casey [aut], Mary Templeton [aut].
- IRISseismic** Classes and Methods for Seismic Data Analysis. Authors: Jonathan Callahan [aut, cre], Rob Casey [aut], Mary Templeton [aut].
- ITEMAN** Classical Item Analysis. Author: Cengiz Zopluoglu.
- IalsaSynthesis** Synthesizing Information Across Collaborating Research. Authors: Will Beasley [aut, cre], Andrey Koval [aut], Integrative Analysis of Longitudinal Studies of Aging (IALSA) [cph].
- ImportExport** Import and Export Data. Authors: Roger Pros, Isaac Subirana, Joan Vila.
- Information** Data Exploration with Information Theory (Weight-of-Evidence and Information Value). Author: Larsen Kim [aut, cre].
- InformationValue** Performance Analysis and Companion Functions for Binary Classification Models. Author: Selva Prabhakaran.
- IntegratedJM** Joint Modelling of the Gene-Expression and Bioassay Data, Taking Care of the Effect Due to a Fingerprint Feature. Authors: Rudradev Sengupta, Nolen Joy Perualila.
- InterSIM** Simulation of Inter-Related Genomic Datasets. Authors: Prabhakar Chalise, Rama Raghavan, Brooke Fridley.
- JGEE** Joint Generalized Estimating Equation Solver. Author: Gul Inan.
- JPEN** Covariance and Inverse Covariance Matrix Estimation Using Joint Penalty. Author: Ashwini Maurya.
- JRF** Joint Random Forest (JRF) for the Simultaneous Estimation of Multiple Related Networks. Authors: Francesca Petralia [aut, cre], Pei Wang [aut], Zhidong Tu [aut], Won-min Song [aut], Adele Cutler [ctb], Leo Breiman [ctb], Andy Liaw [ctb], Matthew Wiener [ctb].
- JacobiEigen** Classical Jacobi Eigensolution Algorithm. Author: Bill Venables.
- KERE** Expectile Regression in Reproducing Kernel Hilbert Space. Authors: Yi Yang, Teng Zhang, Hui Zou.
- KoulMde** Koul's Minimum Distance Estimation in Linear Regression and Autoregression Model. Author: Jiwoong Kim [aut, cre].

- LANDD** Liquid Association for Network Dynamics Detection. Authors: Shangzhao Qiu, Yan Yan, Tianwei Yu.
- LFDR.MLE** Estimation of the Local False Discovery Rates by Type II Maximum Likelihood Estimation. Authors: Ye Yang, Marta Padilla, Alaa Ali, Kyle Leckett, Zhenyu Yang, Zuoqing Li, Corey M. Yanofsky and David R. Bickel.
- LGEWIS** Tests for Genetic Association/Gene-Environment Interaction in Longitudinal Gene-Environment-Wide Interaction Studies. Authors: Zihuai He, Seunggeun Lee, Bhramar Mukherjee, Min Zhang.
- LGRF** Set-Based Tests for Genetic Association in Longitudinal Studies. Author: Zihuai He.
- LOGIT** Functions, Data and Code for Binary and Binomial Data. Authors: Joseph M Hilbe, Rafael S. de Souza.
- LPM** Linear Parametric Models Applied to Hydrological Series. Authors: Corrado Tallorini [aut, cre], Salvatore Grimaldi [aut].
- LRcontrast** Dose Response Signal Detection under Model Uncertainty. Author: Kevin Kokot.
- LSDinterface** Reading LSD Results (.res) Files. Author: Marcelo C. Pereira.
- LSTS** Locally Stationary Time Series. Authors: Ricardo Olea, Wilfredo Palma, Pilar Rubio. In view: *TimeSeries*.
- Langevin** Langevin Analysis in One and Two Dimensions. Authors: Philip Rinn [aut, cre], Pedro G. Lind [aut], David Bastine [ctb].
- LaplaceDeconv** Laplace Deconvolution with Noisy Discrete Non-Equally Spaced Observations on a Finite Time Interval. Authors: Yves Rozenholc and Marianna Pensky.
- Libra** Linearized Bregman Algorithms for Generalized Linear Models. Authors: Feng Ruan, Jiechao Xiong and Yuan Yao.
- LifeHist** Life History Models of Individuals. Author: Ruben H. Roa-Ureta.
- LightningR** Tools for Communication with Lightning-Viz Server. Author: Ermlab.
- LinearRegressionMDE** Minimum Distance Estimation in Linear Regression Model. Author: Jiwoong Kim [aut, cre].
- LinkedMatrix** Column-Linked and Row-Linked Matrices. Authors: Gustavo de los Campos [aut], Alexander Grueneberg [aut, cre].
- LncMod** Predicting Modulator and Functional/Survival Analysis. Authors: Yongsheng Li, Zishan Wang, Juan Xu*, Xia Li*.
- LotkasLaw** Runs Lotka's Law which is One of the Special Applications of Zipf's Law. Authors: Kenneth Buker [aut, cre], Dr. Alon Friedman [ctb].
- MANCIE** Matrix Analysis and Normalization by Concordant Information Enhancement. Authors: Tao Wang, Chongzhi Zang.
- MBTA** Access Data from the Massachusetts Bay Transit Authority (MBTA) Web API. Author: Justin de Benedictis-Kessner [aut, cre].
- MCDM** Multi-Criteria Decision Making Methods. Author: Blanca A. Ceballos Martin.
- MDimNormn** Multi-Dimensional MA Normalization for Plate Effect. Author: Mun-Gwan Hong.
- MFAg** Multiple Factor Analysis (MFA). Author: Paulo Cesar Ossani Marcelo Angelo Cirillo.

- MIXFIM** Evaluation of the FIM in NLMEMs using MCMC. Authors: Marie-Karelle Riviere-Jourdan and France Mentre.
- MLCIRTwithin** Latent Class Item Response Theory Models Under Within-Item Multi-Dimensionality. Authors: Francesco Bartolucci, Silvia Bacci.
- MM2S** Single-Sample Classifier of Medulloblastoma Subtypes for Medulloblastoma Patient Samples, Mouse Models, and Cell Lines. Authors: Deena M.A. Gendoo, Benjamin Haibe-Kains.
- MM2Sdata** Gene Expression Datasets for the 'MM2S' Package. Authors: Deena M.A. Gendoo, Benjamin Haibe-Kains.
- MMWRweek** Convert Dates to MMWR Day, Week, and Year. Author: Jarad Niemi.
- MRQoL** Minimal Clinically Important Difference and Response Shift Effect for Health-Related Quality of Life. Author: Ahmad Ousmen.
- MScombine** Combine Data from Positive and Negative Ionization Mode Finding Common Entities. Author: Monica Calderon-Santiago.
- MVT** Estimation and Testing for the Multivariate t-Distribution. Author: Felipe Osorio.
- ManlyMix** Manly Mixture Modeling and Model-Based Clustering. Authors: Xuwen Zhu [aut, cre], Volodymyr Melnykov [aut], Michael Hutt [ctb, cph] (NM optimization in c), Stephen Moshier [ctb, cph] (eigen calculations in c), Rouben Rostamian [ctb, cph] (memory allocation in c).
- MatchLinReg** Combining Matching and Linear Regression for Causal Inference. Authors: Alireza S. Mahani, Mansour T.A. Sharabiani.
- MaxentVariableSelection** Selecting the Best Set of Relevant Environmental Variables along with the Optimal Regularization Multiplier for Maxent Niche Modeling. Author: Alexander Jueterbock.
- Mediana** Clinical Trial Simulations. Authors: Gautier Paux, Alex Dmitrienko.
- MethylCapSig** Detection of Differentially Methylated Regions using MethylCap-Seq Data. Authors: Deepak N. Ayyala, David E. Frankhouser, Javkhan-Ochir Ganbat, Guido Marcucci, Ralf Bundschuh, Pearly Yan and Shili Lin.
- MixedPoisson** Mixed Poisson Models. Authors: Alicja Wolny-Dominiak and Michal Trzeziok.
- MoTBFs** Learning Hybrid Bayesian Networks using Mixtures of Truncated Basis Functions. Authors: Inmaculada Pérez-Bernabé, Antonio Salmerón.
- MonoPhy** Allows to Explore Monophyly (or Lack of it) of Taxonomic Groups in a Phylogeny. Author: Orlando Schwery.
- MotilityLab** Quantitative Analysis of Motion. Authors: Katharina Dannenberg, Jeffrey Berry, Johannes Textor.
- MultiGHQuad** Multidimensional Gauss-Hermite Quadrature. Author: Karel Kroeze.
- MvBinary** Modelling Multivariate Binary Data with Blocks of Specific One-Factor Distribution. Authors: Matthieu Marbac and Mohammed Sedki.
- NCA** Necessary Condition Analysis. Author: Jan Dul.
- NEpiC** Network Assisted Algorithm for Epigenetic Studies Using Mean and Variance Combined Signals. Author: Peifeng Ruan.
- NIPTeR** Fast and Accurate Trisomy Prediction in Non-Invasive Prenatal Testing. Author: Dirk de Weerd.

- NetSwan** Network Strengths and Weaknesses Analysis. Author: Serge Lhomme.
- NlcOptim** Solve Nonlinear Optimization with Nonlinear Constraints. Authors: Xianyan Chen, Xiangrong Yin. In view: *Optimization*.
- NostalgIR** Advanced Text-Based Plots. Author: Hien D. Nguyen.
- OBsMD** Objective Bayesian Model Discrimination in Follow-Up Designs. Author: Marta Nai Ruscone based on Laura Deldossi's code.
- OECD** Search and Extract Data from the OECD. Author: Eric Persson [aut, cre].
- OTE** Optimal Trees Ensembles for Regression, Classification and Class Membership Probability Estimation. Authors: Zardad Khan, Asma Gul, Aris Perperoglou, Osama Mahmoud, Werner Adler, Miftahuddin and Berthold Lausen.
- OasisR** Outright Tool for the Analysis of Spatial Inequalities and Segregation. Author: Mihai Tivadar. In view: *Spatial*.
- OptGS** Near-Optimal and Balanced Group-Sequential Designs for Clinical Trials with Continuous Outcomes. Authors: James Wason [aut, cre], John Burkardt [ctb]. In view: *ExperimentalDesign*.
- OptiQuantR** Simplifies and Automates Analyzing and Reporting OptiQuant's log Data. Author: Joao Pinelo Silva [aut, cre].
- OriGen** Fast Spatial Ancestry via Flexible Allele Frequency Surfaces. Authors: John Michael O Ranola, John Novembre, and Kenneth Lange.
- OrthoPanels** Dynamic Panel Models with Orthogonal Reparameterization of Fixed Effects. Authors: Davor Cubranic [aut, cre], Mark Pickup [aut], Paul Gustafson [aut], Geoffrey Evans [aut].
- PCA4TS** Segmenting Multiple Time Series by Contemporaneous Linear Transformation. Authors: Jinyuan Chang, Bin Guo and Qiwei Yao. In view: *TimeSeries*.
- PKNCA** Perform Pharmacokinetic Non-Compartmental Analysis. Authors: Bill Denney, Clare Buckeridge.
- PRIMsrc** PRIM Survival Regression Classification. Authors: Jean-Eudes Dazard [aut, cre], Michael Choe [ctb], Michael LeBlanc [ctb], Alberto Santana [ctb].
- PabonLasso** Pabon Lasso Graphs and Comparing Situations of a Unit in Two Different Times. Authors: H Nezami and H Tabesh and AA Azarian.
- Pade** Padé Approximant Coefficients. Author: Avraham Adler [aut, cph, cre]. In view: *NumericalMathematics*.
- PanelCount** Random Effects and/or Sample Selection Models for Panel Count Data. Author: Jing Peng.
- ParallelIPC** Paralellised Versions of Constraint Based Causal Discovery Algorithms. Authors: Thuc Duy Le, Tao Hoang, Shu Hu, and Liang Zhang.
- Pasha** Preprocessing of Aligned Sequences from HTS Analyses. Authors: Romain Fenouil, Nicolas Descostes, Lionel Spinelli, Jean-Christophe Andrau.
- Perc** Using Percolation and Conductance to Find Information Flow Certainty in a Direct Network. Authors: Kevin Fujii [aut], Jian Jin [aut, cre], Aaron Shev [aut], Brianne Beisner [aut], Brenda McCowan [aut, cph], Hsieh Fushing [aut, cph].
- PharmacoGx** Analysis of Large-Scale Pharmacogenomic Data. Authors: Petr Smirnov, Zhaleh Safikhani, Benjamin Haibe-Kains.

- PhxnIme** Run Phoenix NLME and Perform Post-Processing. Authors: Chay Ngee Lim [aut,cre], Shuang Liang [aut], Kevin Feng [aut,cre], Grygoriy Vasilinin [aut], Angela Birnbaum [aut,ths], Jason Chittenden [aut], Bob Leary [ctb], Ana Henry [ctb], Mike Dunlavey [ctb], Samer Mouksassi [com].
- PlotPrjNetworks** Useful Networking Tools for Project Management. Author: Javier Celigueta Muñoz.
- PortfolioEffectEstim** High Frequency Price Estimators by PortfolioEffect. Authors: Andrey Kostin [aut, cre], Aleksey Zemnitskiy [aut], Oleg Nechaev [aut].
- PortfolioEffectHFT** High Frequency Portfolio Analytics by PortfolioEffect. Authors: Aleksey Zemnitskiy [aut, cre], Andrey Kostin [aut], Oleg Nechaev [aut], Craig Otis and others [ctb, cph] (OpenFAST library), Daniel Lemire, Muraoka Taro and others [ctb, cph] (JavaFastPFOR library), Joe Walnes, Jorg Schaible and others [ctb, cph] (XStream library), Dain Sundstrom [ctb, cph] (Snappy library), Extreme! Lab, Indiana University [ctb, cph] (XPP3 library), The Apache Software Foundation [ctb, cph] (Apache Log4j and Commons Lang libraries), Google, Inc. [ctb, cph] (GSON library), Free Software Foundation [ctb, cph] (GNU Trove and GNU Crypto libraries). In view: *Finance*.
- ProNet** Biological Network Construction, Visualization and Analyses. Authors: Xiang-Yun Wu and Xia-Yu Xia.
- ProTrackR** Manipulate and Play 'ProTracker' Modules. Author: Pepijn de Vries [aut, cre, dtc].
- PsiHat** Several Local False Discovery Rate Estimators. Authors: Alaa Ali, Kyle Leckett, Marta Padilla, David R. Bickel (contributions from Bradley Efron, Brit B. Turnbull, Balasubramanian Narasimhan from package locfdr).
- PythonInR** Use Python from Within R. Author: Florian Schwendinger [aut, cre].
- QPot** Quasi-Potential Analysis for Stochastic Differential Equations. Authors: Christopher Moore [aut], Christopher Stieha [aut, cre], Ben Nolting [aut], Maria Cameron [aut], Karen Abbott [aut], James Gregson [cph] (author of expression_parser library: https://github.com/jamesgregson/expression_parser).
- QuantumClone** Clustering Mutations using High Throughput Sequencing (HTS) Data. Author: Paul Deveau [aut, cre].
- RClone** Partially Clonal Populations Analysis. Authors: Sophie Arnaud-Haond [aut], Diane Bailleul [aut, cre], CLONIX [ctb].
- RCriteo** Loading Criteo Data into R. Author: Johannes Burkhardt.
- RFormatter** R Source Code Formatter. Author: Benjamin Fischer [aut, cre].
- RGoogleAnalyticsPremium** Unsampled Data in R for Google Analytics Premium Accounts. Author: Jalpa Joshi Dave.
- RKlout** Fetch Klout Scores for Twitter Users. Author: Binayak Goswami.
- RMixpanel** R API for Mixpanel. Author: Meinhard Ploner.
- RNaviCell** Visualization of High-Throughput Data on Large-Scale Biological Networks. Authors: Eric Bonnet [aut, cre], Paul Deveau [aut].
- RNeo4j** Neo4j Driver for R. Author: Nicole White.
- ROMIplot** Plots Surfaces of Rates of Mortality Improvement. Authors: Roland Rau, Tim Riffe.
- ROptimizely** R Optimizely API. Authors: Keerthi Chandra [aut, cre], Chris Johannessen [aut], Siddharth Somayajula [ctb].

- RRNA** Secondary Structure Plotting for RNA. Author: JP Bida.
- RStoolbox** Tools for Remote Sensing Data Analysis. Authors: Benjamin Leutner [cre, aut], Ned Horning [aut].
- RViennaCL** ViennaCL C++ Header Files. Author: Charles Determan Jr.
- RateDistortion** Routines for Solving Rate-Distortion Problems. Author: Chris R. Sims.
- Rblpapi** R Interface to Bloomberg. Authors: Whit Armstrong, Dirk Eddelbuettel and John Laing. In view: *Finance*.
- Rcereal** C++ Header Files of 'cereal'. Authors: Wush Wu, Randolph Voorhies, and Shane Grant.
- RcppFaddeeva** 'Rcpp' Bindings for the 'Faddeeva' Package. Authors: Baptiste Auguie [aut, cre], Dirk Eddelbuettel [aut], Steven G. Johnson [aut] (Author of Faddeeva).
- RcppShark** R Interface to the Shark Machine Learning Library. Author: Aydin Demircioglu.
- RedditExtractoR** Reddit Data Extraction Toolkit. Author: Ivan Rivera.
- Relatedness** An Algorithm to Infer Relatedness. Author: Fabien Laporte.
- RepeatABEL** GWAS for Multiple Observations on Related Individuals. Author: Lars Ronnegard.
- RevEcoR** Reverse Ecology Analysis on Microbiome. Authors: Yang Cao, Fei Li.
- Rip46** Utils for IP4 and IP6 Addresses. Author: Neal Fultz.
- RobustEM** Robust Mixture Modeling Fitted via Spatial-EM Algorithm for Model-Based Clustering and Outlier Detection. Authors: Aishat Aloba, Kai Yu, Xin Dang, Yixin Chen, and Henry Bart Jr.
- Rphylopars** Phylogenetic Comparative Tools for Missing Data and Within-Species Variation. Authors: Eric W. Goolsby, Jorn Bruggeman, Cecile Ane.
- Rsurrogate** Robust Estimation of the Proportion of Treatment Effect Explained by Surrogate Marker Information. Author: Layla Parast.
- Rtwalk** The R Implementation of the 't-walk' MCMC Algorithm. Author: J Andres Christen.
- RxODE** Facilities for Simulating from ODE-Based Models. Authors: Melissa Hallow [aut, cre], Wenping Wang [aut], David A. James [aut].
- SACCR** SA Counterparty Credit Risk under Basel III. Author: Tasos Grivas.
- SACOBRA** Self-Adjusting COBRA. Authors: Wolfgang Konen [aut], Samineh Bagheri [cre, aut], Patrick Koch [aut].
- SAGA** Software for the Analysis of Genetic Architecture. Authors: Heath Blackmon and Jeffery P. Demuth.
- SALTSampler** Efficient Sampling on the Simplex. Authors: Hannah Director, Scott Vander Wiel, James Gattiker.
- SDR** Subgroup Discovery Algorithms for R. Authors: Angel M. Garcia [aut, cre], Pedro Gonzalez [aut, cph], Cristobal J. Carmona [aut, cph], Francisco Charte [ctb].
- SEHmodel** Spatial Exposure-Hazard Model for Exposure and Impact Assessment on Exposed Individuals. Authors: Marc Bourotte [ctb], Melen Leclerc [aut], Jean-Francois Rey [aut, cre], Samuel Soubeyrand [ctb], Emily Walker [aut].

- SHELF** Tools to Support the Sheffield Elicitation Framework (SHELF). Author: Jeremy Oakley.
- SIBER** Stable Isotope Bayesian Ellipses in R. Authors: Andrew Jackson and Andrew Parnell.
- SOPIE** Non-Parametric Estimation of the Off-Pulse Interval of a Pulsar. Author: Willem Daniel Schutte.
- SPCALDA** A New Reduced-Rank Linear Discriminant Analysis Method. Authors: Yue S. Niu, Ning Hao, and Bin Dong.
- SSRMST** Sample Size Calculation using Restricted Mean Survival Time. Author: Miki Horiguchi.
- STAND** Statistical Analysis of Non-Detects. Authors: E. L. Frome and D. P. Frome.
- STI** Calculation of the Standardized Temperature Index. Author: Marc Fasel [aut, cre].
- STMedianPolish** Spatio-Temporal Median Polish. Authors: William Martinez, Carlos Melo. In view: *SpatioTemporal*.
- SchemaOnRead** Automated Schema on Read. Author: Michael North [aut, cre].
- Sejong** KoNLP static dictionaries and Sejong project resources. Author: Heewon Jeon.
- SensMixed** Analysis of Sensory and Consumer Data in a Mixed Model Framework. Authors: Alexandra Kuznetsova [aut, cre], Per Bruun Brockhoff [aut, ths], Rune Haubo Bojesen Christensen [aut].
- ShapeChange** Change-Point Estimation using Shape-Restricted Splines. Authors: Xiyue Liao and Mary C Meyer.
- Shrinkage** Several Shrinkage Effect-Size Estimators. Authors: Corey M. Yanofsky, Zahra Montazeri, Marta Padilla, Alaa Ali and David R. Bickel.
- SimDesign** Structure for Organizing Monte Carlo Simulation Designs. Author: Phil Chalmers [aut, cre].
- SimHaz** Simulated Survival and Hazard Analysis for Time-Dependent Exposure. Authors: Danyi Xiong, Teeranan Pokaparakarn, Hiroto Udagawa, Nusrat Rabbee.
- SimReg** Similarity Regression Functions. Author: Daniel Greene.
- SocialMediaLab** Tools for Collecting Social Media Data and Generating Networks for Analysis. Author: Timothy Graham & Robert Ackland.
- Sofi** Interfaz interactiva con fines didacticos. Author: Jose D. Loera.
- SoyNAM** Soybean Nested Association Mapping Dataset. Authors: Alencar Xavier, William Beavis, James Specht, Brian Diers, Reka Howard, William Muir, Katy Rainey.
- SpaDES** Develop and Run Spatially Explicit Discrete Event Simulation Models. Authors: Alex M Chubaty [aut, cre], Eliot J B McIntire [aut], Steve Cumming [ctb], Her Majesty the Queen in Right of Canada, as represented by the Minister of Natural Resources Canada [cph].
- SparseFactorAnalysis** Scaling Count and Binary Data with Sparse Factor Analysis. Authors: Marc Ratkovic, In Song Kim, John Londregan, and Yuki Shiraito.
- SparseLearner** Sparse Learning Algorithms Using a LASSO-Type Penalty for Coefficient Estimation and Model Prediction. Authors: Pi Guo, Yuantao Hao.
- StMoMo** Stochastic Mortality Modelling. Authors: Andres Villegas, Pietro Millosovich, Vladimir Kaishev.

- StockChina** Real-Time Stock Price & Volume in China Market. Author: Xiaodong Deng.
- SuperExactTest** Exact Test and Visualization of Multi-Set Intersections. Authors: Minghui Wang, Yongzhong Zhao and Bin Zhang.
- SurvRank** Rank Based Survival Modelling. Author: Michael Laimighofer [aut, cre, ctb].
- SwarmSVM** Ensemble Learning Algorithms Based on Support Vector Machines. Authors: Tong He, Aydin Demircioglu.
- SyncMove** Subsample Temporal Data to Synchronal Events and Compute the MCI. Authors: Martin Rimmler [aut, cre], Thomas Mueller [aut].
- TCGA2STAT** Simple TCGA Data Access for Integrated Statistical Analysis in R. Authors: Ying-Wooi Wan, Genevera I. Allen, Matthew L. Anderson, Zhandong Liu.
- TLBC** Two-Level Behavior Classification. Author: Katherine Ellis.
- TMB** Template Model Builder: A General Random Effect Tool Inspired by ADMB. Authors: Kasper Kristensen [aut, cre, cph], Brad Bell [cph], Hans Skaug [ctb], Arni Magnusson [ctb], Casper Berg [ctb], Anders Nielsen [ctb], Martin Maechler [ctb], Theo Michelot [ctb], Mollie Brooks [ctb], Cole Monnahan [ctb].
- TMDb** Access to TMDb API - Apiary. Author: Andrea Capozio.
- TOC** Total Operating Characteristic Curve and ROC Curve. Authors: Robert G. Pontius, Ali Santacruz, Amin Tayyebi, Benoit Parmentier, Kangping Si.
- TP.idm** Estimation of Transition Probabilities for the Illness-Death Model. Authors: Vanesa Balboa-Barreiro, Jacobo de Una-Alvarez and Luis Meira-Machado.
- TRADER** Tree Ring Analysis of Disturbance Events in R. Authors: Pavel Fibich, Jan Altman, Tuomas Aakala, Jiri Dolezal.
- TSMining** Mining Univariate and Multivariate Motifs in Time-Series Data. Author: Cheng Fan. In view: *TimeSeries*.
- TSTr** Ternary Search Tree for Auto-Completion and Spell Checking. Authors: Ricardo Merino [aut, cre], Samantha Fernandez [ctb].
- TTS** Master Curve Estimates Corresponding to Time-Temperature Superposition. Authors: Antonio Meneses, Salvador Naya, Javier Tarrío-Saavedra.
- TauStar** Efficient Computation of the t^* Statistic of Bergsma and Dassios (2014). Authors: Luca Weihs [aut, cre], Emin Martinian [ctb] (Created the red-black tree library included in package.).
- TestingSimilarity** Bootstrap Test for Similarity of Dose Response Curves Concerning the Maximum Absolute Deviation. Author: Kathrin Moellenhoff.
- TipDatingBeast** Using Tip Dates with Phylogenetic Trees in BEAST. Authors: Adrien Rieux, Camilo Khatchikian.
- Tmisc** Turner Miscellaneous. Author: Stephen Turner.
- Traitspace** A Predictive Model for Trait Based Community Assembly of Plant Species. Authors: Chaitanya Joshi, Xin Li, Daniel Laughlin.
- TransModel** Fit Linear Transformation Models for Censored Data. Authors: Jie Zhou, Jiajia Zhang, Wenbin Lu.
- TruncatedNormal** Truncated Multivariate Normal. Author: Zdravko I. Botev.
- UncerIn2** Implements Models of Uncertainty into the Interpolation Functions. Author: Tomas Burian.

- UpSetR** A More Scalable Alternative to Venn and Euler Diagrams for Visualizing Intersecting Sets. Authors: Jake Conway [cre], Nils Gehlenborg [aut].
- VTrack** A Collection of Tools for the Analysis of Remote Acoustic Telemetry Data. Authors: Ross G. Dwyer, Mathew E. Watts, Hamish A. Campbell & Craig E. Franklin.
- WiSEBoot** Wild Scale-Enhanced Bootstrap. Authors: Megan Heyman, Snigdhanu Chatterjee.
- WikidataR** API Client Library for 'Wikidata'. Authors: Oliver Keyes [aut, cre], Christian Graul [ctb].
- WufooR** R Wrapper for the 'Wufoo.com' - The Form Building Service. Author: John Malc.
- XHWE** X Chromosome Hardy-Weinberg Equilibrium. Authors: Xiao-Ping You, Qi-Lei Zou, Jian-Long Li, Ji-Yuan Zhou.
- XMRF** Markov Random Fields for High-Throughput Genetics Data. Authors: Ying-Wooi Wan, Genevera I. Allen, Yulia Baker, Eunho Yang, Pradeep Ravikumar, Zhandong Liu.
- ZRA** Dynamic Plots for Time Series Forecasting. Author: David Beiner.
- aTSA** Alternative Time Series Analysis. Author: Debin Qiu.
- abbyyR** Access to Abbyy Optical Character Recognition (OCR) API. Author: Gaurav Sood [aut, cre].
- abcrf** Approximate Bayesian Computation via Random Forests. Authors: Jean-Michel Marin [aut], Pierre Pudlo [aut, cre], Christian P. Robert [ctb].
- abodOutlier** Angle-Based Outlier Detection. Author: Jose Jimenez.
- acmeR** Implements ACME Estimator of Bird and Bat Mortality by Wind Turbines. Authors: Robert Wolpert [aut, cre], Jacob Coleman [aut].
- addhazard** Fit Additive Hazards Models for Survival Analysis. Authors: Jie (Kate) Hu [aut, cre], Norman Breslow [aut], Gary Chan [aut].
- alineR** Alignment of Phonetic Sequences Using the 'ALINE' Algorithm. Authors: Sean Downey [aut, cre], Guowei Sun [aut].
- ameco** European Commission Annual Macro-Economic (AMECO) Database. Author: Eric Persson [aut, cre].
- analogsea** Interface to 'Digital Ocean'. Authors: Scott Chamberlain [aut, cre], Hadley Wickham [aut], Winston Chang [aut], RStudio [cph].
- anonymizer** Anonymize Data Containing Personally Identifiable Information. Author: Paul Hendricks [aut, cre].
- aop** Adverse Outcome Pathway Analysis. Author: Lyle D. Burgoon.
- apaStyle** Generate APA Tables for MS Word. Author: Jort de Vreeze [aut, cre]. In view: *ReproducibleResearch*.
- apaTables** Create American Psychological Association (APA) Style Tables. Author: David Stanley [aut, cre].
- appnn** Amyloid Propensity Prediction Neural Network. Authors: Carlos Família, Sarah R. Dennison, Alexandre Quintas, David A. Phoenix.
- apricom** Tools for the a Priori Comparison of Regression Modelling Strategies. Authors: Romin Pajouheshnia [aut, cre], Wiebe Pestman [aut], Rolf Groenwold [aut].
- arqas** Application in R for Queueing Analysis and Simulation. Author: Borja Varela.

- artfima** Fit ARTFIMA Model. Authors: A. I. McLeod, Farzad Sabzikar, Mark M. Meerschaert.
- asdreader** Reading ASD Binary Files in R. Author: Pierre Roudier [aut, cre].
- asht** Applied Statistical Hypothesis Tests. Author: Michael P. Fay.
- asremlPlus** Augments the Use of 'Asreml' in Fitting Mixed Models. Author: Chris Brien.
- assertive.base** A Lightweight Core of the 'assertive' Package. Authors: Richard Cotton [aut, cre], Sunkyoo Choi [trl], Ivanka Skakun [trl], Gergely Daroczi [trl], Anton Antonov [trl], Hisham Ben Hamidane [trl], Anja Billing [trl], Aditya Bhagwat [trl], Rasmus Baath [trl], Mine Cetinkaya-Rundel [trl], Aspasia Chatziefthymiou [trl].
- assertive.code** Assertions to Check Properties of Code. Author: Richard Cotton [aut, cre].
- assertive.data** Assertions to Check Properties of Data. Author: Richard Cotton [aut, cre].
- assertive.data.uk** Assertions to Check Properties of Strings. Author: Richard Cotton [aut, cre].
- assertive.data.us** Assertions to Check Properties of Strings. Author: Richard Cotton [aut, cre].
- assertive.datetimes** Assertions to Check Properties of Dates and Times. Author: Richard Cotton [aut, cre].
- assertive.files** Assertions to Check Properties of Files. Author: Richard Cotton [aut, cre].
- assertive.matrices** Assertions to Check Properties of Matrices. Author: Richard Cotton [aut, cre].
- assertive.models** Assertions to Check Properties of Models. Author: Richard Cotton [aut, cre].
- assertive.numbers** Assertions to Check Properties of Numbers. Author: Richard Cotton [aut, cre].
- assertive.properties** Assertions to Check Properties of Variables. Author: Richard Cotton [aut, cre].
- assertive.reflection** Assertions for Checking the State of R. Author: Richard Cotton [aut, cre].
- assertive.sets** Assertions to Check Properties of Sets. Author: Richard Cotton [aut, cre].
- assertive.strings** Assertions to Check Properties of Strings. Author: Richard Cotton [aut, cre].
- assertive.types** Assertions to Check Types of Variables. Author: Richard Cotton [aut, cre].
- autovarCore** Automated Vector Autoregression Models and Networks. Author: Ando Emerencia [aut, cre]. In view: *TimeSeries*.
- averisk** Calculation of Average Population Attributable Fractions and Confidence Intervals. Author: John Ferguson [aut, cre].
- bWGR** Bagging Whole-Genome Regression. Authors: Alencar Xavier, William Muir, Katy Rainey.
- backShift** Learning Causal Cyclic Graphs from Unknown Shift Interventions. Author: Christina Heinze.
- backpipe** Backward Pipe Operator. Authors: Christopher Brown [cre, aut], Decision Patterns [cph].

- backtestGraphics** Interactive Graphics for Portfolio Data. Authors: David Kane, Ziqi Lu, Fan Zhang, Miller Zijie Zhu.
- bacr** Bayesian Adjustment for Confounding. Author: Chi Wang.
- bapred** Batch Effect Removal (in Phenotype Prediction using Gene Data). Authors: Roman Hornung, David Causeur.
- batman** Convert Categorical Representations of Logicals to Actual Logicals. Authors: Oliver Keyes [aut, cre], Ruben C. Arslan [ctb], Christopher Akiki [ctb], Mine Cetinkaya-Rundel [ctb], Peter Meissner [ctb], Ilaria Prosdocimi [ctb], Thomas Leeper [ctb], Amy Lee [ctb], Adolfo Álvarez [ctb].
- batteryreduction** An R Package for Data Reduction by Battery Reduction. Authors: Chunqiao Luo [aut, cre], Ralph D'Agostino [aut].
- bcRep** Advanced Analysis of B Cell Receptor Repertoire Data. Author: Julia Bischof.
- bcrypt** 'Blowfish' Password Hashing Algorithm. Authors: Jeroen Ooms [cre, aut], Damien Miller [cph], Niels Provos [cph].
- bdots** Bootstrapped Differences of Time Series. Authors: Michael Seedorff, Jacob Oleson, Grant Brown, Joseph Cavanaugh, and Bob McMurray.
- bedr** Genomic Region Processing using Tools Such as Bedtools, Bedops and Tabix. Authors: Daryl Waggott, Syed Haider, Emilie Lalonde, Clement Fung, Paul C. Boutros.
- betalink** Beta-Diversity Within a Metaweb of Species Interactions. Author: Timothee Poisot.
- bimixt** Estimates Mixture Models for Case-Control Data. Authors: Michelle Winerip, Garrick Wallstrom, Joshua LaBaer.
- biomartr** Functional Annotation and Biological Data Retrieval with R. Author: Hajk-Georg Drost.
- blavaan** Bayesian Latent Variable Analysis. Authors: Edgar Merkle [aut, cre], Yves Rosseel [aut].
- bmeta** A Package for Bayesian Meta-Analysis and Meta-Regression. Authors: Tao Ding, Gianluca Baio.
- bnclassify** Learning Discrete Bayesian Network Classifiers from Data. Authors: Mihaljevic Bojan [aut, cre], Bielza Concha [aut], Larranaga Pedro [aut], Wickham Hadley [ctb] (some code extracted from memoise package). In view: *MachineLearning*.
- bnstruct** Bayesian Network Structure Learning from Data with Missing Values. Authors: Francesco Sambo [aut, cre], Alberto Franzin [aut].
- brotli** A Compression Format Optimized for the Web. Authors: Jeroen Ooms [aut, cre], Google, Inc [aut, cph] (Brotli C++ library).
- br** Bayesian Inference on the Ratio of Two Poisson Rates. Author: Stéphane Laurent.
- branching** Fetch Phylogenies from Many Sources. Author: Scott Chamberlain [aut, cre].
- bssn** Birnbaum-Saunders Model Based on Skew-Normal Distribution. Authors: Rocio Paola Maehara and Luis Benites Sanchez.
- btergm** Temporal Exponential Random Graph Models by Bootstrapped Pseudolikelihood. Authors: Philip Leifeld [aut, cre], Skyler J. Cranmer [ctb], Bruce A. Desmarais [ctb].
- caRools** CRISPR AnalyzeR for Pooled CRISPR Screens. Authors: Jan Winter, Florian Heigwer.
- calACS** Count All Common Subsequences. Author: Alan Gu.

- camtrapR** Camera Trap Data Management and Preparation of Occupancy and Spatial Capture-Recapture Analyses. Authors: Juergen Niedballa [aut, cre], Alexandre Courtiol [aut], Rahel Sollmann [aut], John Mathai [ctb], Seth Timothy Wong [ctb], An The Truong Nguyen [ctb], Azlan bin Mohamed [ctb], Andrew Tilker [ctb], Andreas Wilting [ctb, ths].
- captioner** Numbers Figures and Creates Simple Captions. Author: Letaw Alatheia [aut, cre].
- captr** Client for the Captricity API. Author: Gaurav Sood [aut, cre].
- cardioModel** Cardiovascular Safety Exposure-Response Modeling in Early-Phase Clinical Studies. Authors: Daniela J Conrado [aut, cre], William S Denney [aut], Gregory J Hather [aut], Danny Chen [ctb].
- cartography** Thematic Cartography. Authors: Timothée Giraud [cre, aut], Nicolas Lambert [aut].
- cate** High Dimensional Factor Analysis and Confounder Adjusted Testing and Estimation. Authors: Jingshu Wang [aut], Qingyuan Zhao [aut, cre].
- causaldrf** Tools for Estimating Causal Dose Response Functions. Authors: Douglas Galagate [cre], Joseph Schafer [aut].
- cdcfluvview** Retrieve U.S. Flu Season Data from the CDC FluView Portal. Author: Bob Rudis.
- chunked** Chunkwise Text-File Processing for 'dplyr'. Author: Edwin de Jonge.
- ckanr** Client for the Comprehensive Knowledge Archive Network ('CKAN') API. Authors: Scott Chamberlain [aut, cre], Imanuel Costigan [ctb], Wush Wu [ctb], Florian Mayer [ctb].
- clarifai** Access to Clarifai API. Author: Gaurav Sood [aut, cre].
- cleangeo** Cleaning Geometries from Spatial Objects. Author: Emmanuel Blondel.
- climrends** Statistical Methods for Climate Sciences. Author: Jose Gama [aut, cre].
- clipr** Read and Write from the System Clipboard. Authors: Matthew Lincoln [aut, cre], Louis Maddox [ctb].
- clisymbols** Unicode Symbols at the R Prompt. Authors: Gabor Csardi [aut, cre], Sindre Sorhus [aut].
- clogitboost** Boosting Conditional Logit Model. Authors: Haolun Shi [aut, cre], Guosheng Yin [aut].
- clttools** Central Limit Theorem Experiments (Theoretical and Simulation). Authors: Simiao Ye, Jingning Mei.
- cmsaf** Tools for CM SAF Netcdf Data. Author: Steffen Kothe.
- cnmlcd** Maximum Likelihood Estimation of a Log-Concave Density Function. Authors: Yu Liu, Yong Wang.
- coala** A Framework for Coalescent Simulation. Authors: Paul Staab [aut, cre, cph], Dirk Metzler [ths].
- codyn** Community Dynamics Metrics. Authors: Lauren Hallett [aut], Sydney K. Jones [aut], Andrew A. MacDonald [aut], Dan F. B. Flynn [aut], Peter Slaughter [aut], Julie Ripplinger [aut], Scott L. Collins [aut], Corinna Gries [aut], Matthew B. Jones [aut, cre].
- colorhplot** Colorful Hierarchical Clustering Dendrograms. Author: Damiano Fantini.

- cometExactTest** Exact Test from the Combinations of Mutually Exclusive Alterations (CoMEt) Algorithm. Authors: Max Leiserson [aut, cre], Hsin-Ta Wu [aut], Fabio Vandin [ctb], Vivian Hsiao [ctb], Benjamin Raphael [ctb].
- conover.test** Conover-Iman Test of Multiple Comparisons Using Rank Sums. Author: Alexis Dinno.
- contoureR** Contouring of Non-Regular Three-Dimensional Data. Author: Nicholas Hamilton.
- controlTest** Median Comparison for Two-Sample Right-Censored Survival Data. Author: Eric Kawaguchi.
- convosPAT** Convolution-Based Nonstationary Spatial Modeling. Author: Mark D. Risser [aut, cre].
- cord** Community Estimation in G-Models via CORD. Authors: Xi (Rossi) LUO, Florentina Bunea, Christophe Giraud.
- coreNLP** Wrappers Around Stanford CoreNLP Tools. Authors: Taylor Arnold, Lauren Tilton.
- corkscrew** Preprocessor for Data Modeling. Authors: Navin Loganathan [aut], Mohan Manivannan [aut], Santhosh Sasanapuri [aut, cre], LatentView Analytics [ctb].
- corregp** Functions and Methods for Correspondence Regression. Author: Koen Plevoets [aut, cre].
- covBM** Brownian Motion Processes for ‘nlme’ Models. Author: Oliver Stirrup [aut, cre].
- covmat** Covariance Matrix Estimation. Author: Rohit Arora. In view: *Finance*.
- cowplot** Streamlined Plot Theme and Plot Annotations for ‘ggplot2’. Authors: Claus O. Wilke [aut, cre], Hadley Wickham [cph].
- cowsay** Messages, Warnings, Strings with Ascii Animals. Authors: Scott Chamberlain [aut, cre], Tyler Rinker [aut], Thomas Leeper [aut], Noam Ross [aut], Rich FitzJohn [aut], Carson Sievert [aut], Kiyoko Gotanda [aut], Andy Teucher [aut], Karl Broman [aut], Franz-Sebastian Krah [aut].
- cpgen** Parallelized Genomic Prediction and GWAS. Author: Claas Heuer.
- creditr** Credit Default Swaps in R. Authors: Heidi Chen, Yuanchu Dang, David Kane, Yang Lu, Skylar Smith, Kanishka Malik, and Miller Zijie Zhu.
- credule** Credit Default Swap Functions. Authors: Bertrand Le Nezet [cre, aut, cph], Richard Brent [ctb, cph], John Burkardt [ctb, cph]. In view: *Finance*.
- crmPack** Object-Oriented Implementation of CRM Designs. Authors: Daniel Sabanes Bove, Wai Yin Yeung, Giuseppe Palermo, Thomas Jaki.
- crop** Graphics Cropping Tool. Author: Marius Hofert [aut, cre].
- crnp** Penalized Variable Selection in Competing Risks Regression. Author: Zhixuan Fu.
- crskdiag** Diagnostics for Fine and Gray Model. Author: Jianing Li.
- cruts** Interface to Climatic Research Unit Time-Series Version 3.21 Data. Author: Benjamin M. Taylor.
- ctmcmove** Modeling Animal Movement with Continuous-Time Discrete-Space Markov Chains. Author: Ephraim Hanks. In view: *SpatioTemporal*.
- ctmm** Continuous-Time Movement Modeling. Authors: Chris H. Fleming and J. M. Calabrese. In view: *SpatioTemporal*.

- ctsem** Continuous Time Structural Equation Modelling. Authors: Manuel Voelkle [aut, cph] (Original development of continuous time model specification within OpenMx, advisor for further development), Han Oud [aut, cph] (Original development of continuous time model specification within OpenMx), Charles Driver [aut, cre, cph] (Further development of continuous time model specification within OpenMx, package development, documentation and maintenance).
- cvxbiclustr** Convex Biclustering Algorithm. Authors: Eric C. Chi, Genevera I. Allen, Richard G. Baraniuk.
- cycleRtools** Tools for Cycling Data Analysis. Author: Jordan Mackie [aut, cre].
- cymruservices** Query Team Cymru IP Address, Autonomous System Number (ASN), Border Gateway Protocol (BGP), Bogon and Malware Hash Data Services. Author: Bob Rudis [aut, cre].
- d3heatmap** Interactive Heat Maps Using ‘htmlwidgets’ and ‘D3.js’. Authors: Joe Cheng [aut, cre], Tal Galili [aut], RStudio, Inc. [cph], Michael Bostock [ctb, cph] (D3.js library), Justin Palmer [ctb, cph] (d3.tip library).
- dMod** Dynamic Modeling and Parameter Estimation in ODE Models. Author: Daniel Kaschek.
- dad** Three-Way Data Analysis Through Densities. Authors: Rachid Boumaza, Pierre Santagostini, Smail Yousfi, Sabine Demotes-Mainard.
- datafsm** Estimating Finite State Machine Models from Data. Authors: Nay John J. [cre, aut], Gilligan Jonathan M. [aut].
- dataonderivatives** Easily Source Publicly Available Data on Derivatives. Author: Imanuel Costigan [aut, cre].
- datastepr** An Implementation of a SAS-Style Data Step. Author: Brandon Taylor.
- dbscan** Density Based Clustering of Applications with Noise (DBSCAN) and Related Algorithms. Authors: Michael Hahsler [aut, cre, cph], Sunil Arya [ctb, cph], David Mount [ctb, cph]. In view: *Cluster*.
- dc3net** Inferring Disease Networks via Differential Network Inference. Author: Gokmen Altay.
- ddR** Distributed Data Structures in R. Authors: Edward Ma, Indrajit Roy, Michael Lawrence.
- deformula** Integration of One-Dimensional Functions with Double Exponential Formulas. Author: Hiroyuki Okamura.
- dequer** An R ‘Deque’ Container. Author: Drew Schmidt [aut, cre].
- describer** Describe Data in R Using Common Descriptive Statistics. Author: Paul Hendricks [aut, cre].
- desiR** Desirability Functions for Ranking, Selecting, and Integrating Data. Author: Stanley E. Lazic.
- detector** Detect Data Containing Personally Identifiable Information. Author: Paul Hendricks [aut, cre].
- diezeit** R Interface to the ZEIT ONLINE Content API. Author: Christian Graul.
- diffR** Display Differences Between Two Files using Codediff Library. Author: John Muschelli [aut, cre].
- dina** Bayesian Estimation of DINA Model. Author: Steven Andrew Culpepper [aut, cph, cre].

- distcomp** Computations over Distributed Data without Aggregation. Authors: Balasubramanian Narasimhan [aut, cre], Marina Bendersky [aut], Sam Gross [aut], Terry M. Therneau [ctb], Thomas Lumley [ctb].
- diverse** Diversity Measures for Complex Systems. Authors: Miguel R. Guevara, Dominik Hartmann, Marcelo Mendoza.
- dml** Distance Metric Learning in R. Authors: Yuan Tang, Gao Tao, Xiao Nan.
- docopulae** Optimal Designs for Copula Models. Author: Andreas Rappold [aut, cre].
- docxtractr** Extract Data Tables from Microsoft Word Documents. Author: Bob Rudis [aut, cre].
- dotwhisker** Dot-and-Whisker Plots of Regression Results. Authors: Frederick Solt, Yue Hu.
- downscale** Downscaling Species Occupancy. Author: Charles Marsh [aut, cre].
- drLumi** Multiplex Immunoassays Data Analysis. Authors: Hector Sanz [aut, cre], John Aponte [aut], Jaroslaw Harezlak [aut], Yan Dong [aut], Magdalena Murawska [aut], Clarissa Valim [aut], Aintzane Ayestaran [ctb], Ruth Aguilar [ctb], Gemma Moncunill [ctb].
- dtwSat** Time-Weighted Dynamic Time Warping for Remote Sensing Time Series Analysis. Author: Victor Maus [aut, cre].
- dtwclust** Time Series Clustering with Dynamic Time Warping. Author: Alexis Sarda-Espinosa. In view: *TimeSeries*.
- easyVerification** Ensemble Forecast Verification for Large Datasets. Authors: Jonas Bhend [aut, cre], Jacopo Ripoldi [ctb], Claudia Mignani [ctb], Irina Mahlstein [ctb], Rebecca Hiller [ctb], Christoph Spirig [ctb], Mark Liniger [ctb], Andreas Weigel [ctb], Joaquin Bedia Jimenez [ctb], Matteo De Felice [ctb].
- easypower** Sample Size Estimation for Experimental Designs. Author: Aaron McGarvey.
- ecospace** Simulating Community Assembly and Ecological Diversification Using Ecospace Frameworks. Author: Phil Novack-Gottshall [aut, cre].
- ecotoxicology** Methods for Ecotoxicology. Author: Jose Gama [aut, cre, trl].
- edgar** Platform for EDGAR Filing Management. Authors: Gunratan Lonare, Bharat Patil.
- edgebundleR** Circle Plot with Bundled Edges. Authors: Garth Tarr [aut, cre], Ellis Patrick [aut], Kent Russell [ctb].
- eel** Extended Empirical Likelihood. Authors: Fan Wu and Yu Zhang.
- eemR** Tools for Pre-Processing Emission-Excitation-Matrix (EEM). Author: Philippe Massicotte [aut, cre].
- efflog** The Causal Effects for a Causal Loglinear Model. Author: Gloria Gheno [aut, cre].
- elasso** Enhanced Least Absolute Shrinkage and Selection Operator Regression Model. Author: Pi Guo.
- epandist** Statistical Functions for the Censored and Uncensored Epanechnikov Distribution. Author: Mathias Borritz Milfeldt [aut, cre].
- epanetReader** Read Epanet Files into R. Author: Bradley J. Eck.
- epiDisplay** Epidemiological Data Display Package. Author: Virasakdi Chongsuvivatwong.
- epifit** Flexible Modelling Functions for Epidemiological Data Analysis. Authors: Kazutaka Doi [aut, cre], Kei Sakabe [ctb], Masataka Taruri [ctb].

- erp.easy** Event-Related Potential (ERP) Data Exploration Made Easy. Author: Travis Moore [aut, cre].
- etma** Epistasis Test in Meta-Analysis (ETMA). Author: Chin Lin. In view: *MetaAnalysis*.
- exreport** Fast, Reliable and Elegant Reproducible Research. Authors: Jacinto Arias [aut, cre], Javier Cozar [aut].
- extremogram** Estimation of Extreme Value Dependence for Time Series Data. Authors: Nadezda Frolova, Ivor Cribben.
- eyetrackingR** Eye-Tracking Data Analysis. Authors: Jacob Dink [aut, cre], Brock Ferguson [aut].
- eze** Easy Interface to Effective Concentration Calculations. Authors: Zhian N. Kamvar [cre, aut], Niklaus J. Grunwald [ths, ctb].
- ezsummary** Summarise Data in the Quick and Easy Way. Author: Hao Zhu [aut, cre].
- fancycut** A Fancy Version of 'base::cut'. Author: Adam Rich [aut, cre].
- fastdigest** Fast, Low Memory-Footprint Digests of R Objects. Authors: Gabriel Becker, Bob Jenkins (SpookyHash algorithm and C++ implementation).
- fasttime** Fast Utility Function for Time Parsing and Conversion. Author: Simon Urbanek.
- favnums** A Dataset of Favourite Numbers. Authors: Oliver Keyes [aut, cre], Alex Bellos [cph].
- filematrix** File-Backed Matrix Class with Convenient Read and Write Access. Author: Andrey Shabalin.
- flacco** Feature-Based Landscape Analysis of Continuous and Constraint Optimization Problems. Authors: Pascal Kerschke [aut, cre], Jan Dagefoerde [aut].
- flexPM** Flexible Parametric Models for Censored and Truncated Data. Author: Paolo Frumento.
- flowDiv** Cytometric Diversity Indices from 'FlowJo' Workspaces. Authors: Bruno M.S. Wanderley, María Victoria Quiroga, André M. Amado, Fernando Unrein.
- flows** Flow Selection and Analysis. Authors: Timothée Giraud [cre, aut], Laurent Beauguitte [aut], Marianne Guérois [ctb].
- forestmodel** Forest Plots from Regression Models. Author: Nick Kennedy.
- fourPNO** Bayesian 4 Parameter Item Response Model. Author: Steven Andrew Culpepper [aut, cre].
- frailtySurv** General Semiparametric Shared Frailty Model. Authors: John V. Monaco [aut, cre], Malka Gorfine [aut], Li Hsu [aut].
- franc** Detect the Language of Text. Authors: Gabor Csardi, Titus Wormer, Maciej Ceglowski, Jacob R. Rideout, and Kent S. Johnson.
- freqdom** Frequency Domain Analysis for Multivariate Time Series. Authors: Hormann S., Kidzinski L.
- ftsspec** Spectral Density Estimation and Comparison for Functional Time Series. Author: Shahin Tavakoli [aut, cre].
- fulltext** Full Text of Scholarly Articles Across Many Data Sources. Author: Scott Chamberlain [aut, cre].
- functools** Functional Programming in R. Author: Paul Hendricks [aut, cre].

- funcy** Functional Clustering Algorithms. Authors: Christina Yassouridis [aut, cre], Dominik Ernst [ctb], Madison Giacomci [ctb], Sophie Lambert-Lacroix [ctb], Guillemette Marot [ctb], Franck Picard [ctb], Nicoleta Serban [ctb], Huijing Jiang [ctb], Gareth James [ctb], Catherine Sugar [ctb], Hans-Georg Mueller [ctb], Jie Peng [ctb], Chiou Jeng-Min [ctb], Pai-Ling Li [ctb].
- fungible** Fungible Coefficients and Monte Carlo Functions. Authors: Niels G. Waller and Jeff Jones.
- funr** Simple Utility Providing Terminal Access to all R Functions. Author: Sahil Seth [aut, cre].
- future** A Future API for R. Author: Henrik Bengtsson [aut, cre, cph]. In view: *HighPerformanceComputing*.
- gamsel** Fit Regularization Path for Generalized Additive Models. Authors: Alexandra Chouldechova and Trevor Hastie.
- gaston** Genetic Data Manipulation (Quality Control, GRM and LD Computations, PCA), Linear Mixed Models (AIREML Algorithm), Association Testing. Author: Hervé Perdry & Claire Dandine-Roulland.
- gdtools** Utilities for Graphical Rendering. Authors: David Gohel [aut, cre], Hadley Wickham [aut], Jeroen Ooms [ctb], Yixuan Qiu [ctb], RStudio [cph].
- gendist** Generated Probability Distribution Models. Author: Shaiful Anuar Abu Bakar.
- generator** Generate Data Containing Fake Personally Identifiable Information. Author: Paul Hendricks [aut, cre].
- geo** Draw and Annotate Maps, Especially Charts of the North Atlantic. Authors: Hoskuldur Bjornsson, Sigurdur Thor Jonsson, Arni Magnusson, and Bjarki Thor Elvarsson.
- geoknife** Web-Processing of Large Gridded Datasets. Authors: Jordan Read [aut, cre], Jordan Walker [aut], Alison Appling [aut], David Blodgett [aut], Emily Read [aut], Luke Winslow [aut].
- geosptdb** Spatio-Temporal; Inverse Distance Weighting and Radial Basis Functions with Distance-Based Regression. Authors: Carlos Melo, Oscar Melo.
- gesis** R Client for GESIS Data Catalogue (DBK). Author: Eric Persson [aut, cre].
- getMet** Get Meteorological Data for Hydrological Modeling. Authors: Andrew Sommerlot [aut, cre], Daniel Fuka [aut], Zachary Easton [aut].
- ggfortify** Data Visualization Tools for Statistical Analysis Results. Authors: Masaaki Horikoshi and Yuan Tang.
- ggplot2movies** Movies Data. Authors: Hadley Wickham [aut, cre], RStudio [cph].
- ggsn** North Symbols and Scale Bars for Maps Created with 'ggplot2' or 'ggmap'. Author: Oswaldo Santos Baquero [aut, cre].
- gimms** Download and Process GIMMS NDVI3g Data. Author: Florian Detsch.
- gitlabr** Access to the Gitlab API. Author: Jirka Lewandowski [aut, cre].
- gkmSVM** Gapped-Kmer Support Vector Machine. Author: Mahmoud Ghandi.
- glamlasso** Lasso Penalization in Large Scale Generalized Linear Array Models. Author: Adam Lund.
- glm.ddR** Distributed 'glm' for Big Data using 'ddR' API. Authors: Vishrut Gupta, Arash Fard.

- globals** Identify Global Objects in R Expressions. Author: Henrik Bengtsson [aut, cre, cph].
- glycanr** Tools for Analysing N-Glycan Data. Author: Ivo Ugrina [aut, cre].
- gmapsdistance** Distance and Travel Time Between Two Points from Google Maps. Author: Rodrigo Azuero Melo.
- gmum.r** GMUM Machine Learning Group Package. Authors: Wojciech Czarnecki, Stanislaw Jastrzebski, Marcin Data, Igor Sieradzki, Mateusz Bruno-Kaminski, Karol Jurek, Piotr Kowenzowski, Michal Pletty, Konrad Talik, Maciej Zgliczynski.
- gmwm** Generalized Method of Wavelet Moments. Authors: James Balamuta [aut, cph], Stephane Guerrier [ctb, cre, cph], Roberto Molinari [ctb, cph], Wenchao Yang [ctb].
- gofCopula** Goodness-of-Fit Tests for Copulae. Authors: Ostap Okhrin, Shulin Zhang, Qian M. Zhou, Simon Trimborn.
- googleAuthR** Easy Authentication with Google OAuth2 APIs. Author: Mark Edmondson [aut, cre].
- googlesheets** Manage Google Spreadsheets from R. Authors: Jennifer Bryan [aut, cre], Joanna Zhao [aut].
- gpuR** GPU Functions for R Objects. Author: Charles Determan Jr. In view: *HighPerformanceComputing*.
- gquad** G Quadruplex Motif Prediction Tool. Author: Hannah O. Ajoge.
- graticule** Meridional and Parallel Lines for Maps. Author: Michael D. Sumner [aut, cre].
- growthcurver** Simple Metrics to Summarize Growth Curves. Author: Kathleen sprouffske [aut, cre].
- gpregOverlap** Penalized Regression Models with Overlapping Grouped Covariates. Authors: Yaohui Zeng, Patrick Breheny.
- gtrendsR** R Functions to Perform and Display Google Trends Queries. Authors: Philippe Massicotte [aut, cre], Dirk Eddelbuettel [aut].
- gyriq** Kinship-Adjusted Survival SNP-Set Analysis. Authors: Martin Leclerc and Lajmi Lakhil Chaieb.
- hashids** Generate Short Unique YouTube-Like IDs (Hashes) from Integers. Authors: Alex Shum [aut, cre], Ivan Akimov [aut] (original author of hashids – implemented in javascript), David Aurelio [ctb] (implemented hashids in python 2 and 3).
- hashr** Hash R Objects to Integers Fast. Authors: Mark van der Loo [aut, cre], Paul Hsieh [ctb].
- hdnom** Nomograms for High-Dimensional Cox Models. Authors: Miaozhu Li, Nan Xiao.
- hierband** Convex Banding of the Covariance Matrix. Authors: Jacob Bien, Florentina Bunea, and Luo Xiao.
- highmean** Two-Sample Tests for High-Dimensional Mean Vectors. Authors: Lifeng Lin and Wei Pan.
- hindexcalculator** H-Index Calculator using Data from a Web of Science (WoS) Citation Report. Author: Sepand Alavifard [aut, cre].
- hit** Hierarchical Inference Testing. Author: Jonas Klasen [aut, cre].
- homomorpheR** Homomorphic Computations in R. Author: Balasubramanian Narasimhan [aut, cre].

- hotspot** Software Hotspot Analysis. Author: Csaba Farago.
- hqreg** Regularization Paths for Huber Loss Regression and Quantile Regression Penalized by Lasso or Elastic-Net. Author: Congrui Yi.
- httpcode** HTTP Status Code Helper. Author: Scott Chamberlain [aut, cre].
- humaniformat** A Parser for Human Names. Author: Oliver Keyes.
- iLaplace** Improved Laplace Approximation for Integrals of Unimodal Functions. Authors: Erlis Ruli [aut, cre], Nicola Sartori [aut], Laura Ventura [aut].
- iNEXT** Interpolation and Extrapolation for Species Diversity. Authors: T. C. Hsieh, K. H. Ma and Anne Chao.
- iaQCA** The Irvine Robustness Assessment for Qualitative Comparative Analysis. Authors: C. Ben Gibson [aut, cre], Burrell Vann Jr [aut].
- icsw** Inverse Compliance Score Weighting. Authors: Peter M. Aronow, Dean Eckles and Kyle Peyton.
- idendr0** Interactive Dendrograms. Author: Tomas Sieger.
- idm** Incremental Decomposition Methods. Authors: Alfonso Iodice D'Enza [aut], Angelos Markos [aut, cre], Davide Buttarazzi [ctb].
- ifaTools** Toolkit for Item Factor Analysis with OpenMx. Author: Joshua N. Pritikin [cre, aut].
- imPois** Imprecise Inferential Framework for Poisson Sampling Model. Authors: Chel Hee Lee [aut, cre, cph], Mikelis Bickis [aut, ths, cph].
- imager** Image Processing Library Based on CImg. Authors: Simon Barthelme [aut, cre], Antoine Cecchi [ctb].
- immer** Item Response Models for Multiple Ratings. Authors: Alexander Robitzsch [aut, cre], Jan Steinfeld [aut].
- imputeMissings** Impute Missing Values in a Predictive Context. Authors: Matthijs Meire, Michel Ballings, Dirk Van den Poel.
- imputeTS** Time Series Missing Value Imputation. Author: Steffen Moritz. In view: *Time-Series*.
- inbreedR** Analysing Inbreeding Based on Genetic Markers. Authors: Martin A. Stoffel [aut, cre], Mareike Esser [aut].
- inegiR** Integrate INEGI's (Mexican Stats Office) API with R. Author: Eduardo Flores.
- influenceR** Software Tools to Quantify Structural Importance of Nodes in a Network. Authors: Jacobs Simon [aut], Khanna Aditya [aut, cre], Madduri Kamesh [ctb], Bader David [ctb].
- injectoR** R Dependency Injection. Author: Lev Kuznetsov.
- instaR** Access to Instagram API via R. Authors: Pablo Barbera [aut, cre], Tiago Dantas [ctb], Jonne Guyt [ctb].
- interactionTest** Calculates Critical Test Statistics to Control False Discovery and Familywise Error Rates in Marginal Effects Plots. Authors: Justin Esarey and Jane Lawrence Sumner.
- interplot** Plot the Effects of Variables in Interaction Terms. Authors: Frederick Solt, Yue Hu.
- invLT** Inversion of Laplace-Transformed Functions. Author: Christopher Barry.

- ioncopy** Calling Copy Number Alterations in Amplicon Sequencing Data. Author: Jan Budczies.
- iotools** I/O Tools for Streaming. Authors: Simon Urbanek, Taylor Arnold.
- ipflasso** Integrative Lasso with Penalty Factors. Authors: Anne-Laure Boulesteix, Mathias Fuchs.
- iptools** Manipulate, Validate and Resolve IP Addresses. Authors: Bob Rudis [aut, cre], Oliver Keyes [aut].
- isoph** Isotonic Proportional Hazards Model. Authors: Yunro Chung [cre], Anastasia Ivanova, Michael G. Hudgens and Jason P. Fine.
- jetset** One-to-One Gene-Probeset Mapping for Affymetrix Human Microarrays. Authors: Qiyuan Li, Aron Eklund.
- jmotif** Tools for Time Series Analysis Based on Symbolic Aggregate Dcretization. Author: Pavel Senin [aut, cre]. In view: *TimeSeries*.
- jrvFinance** Basic Finance; NPV/IRR/Annuities/Bond-Pricing; Black Scholes. Author: Jayanth Varma [aut, cre].
- jug** Create a Simple Web API for your R Functions. Author: Bart Smeets.
- jvnVaR** Value at Risk. Author: Hung Vu.
- kdecopula** Kernel Smoothing for Bivariate Copula Densities. Author: Thomas Nagler [aut, cre].
- kergp** Gaussian Process Laboratory. Authors: Yves Deville, David Ginsbourger, Olivier Roustant. Contributors: Nicolas Durrande.
- kernDeepStackNet** Kernel Deep Stacking Networks. Authors: Thomas Welchowski and Matthias Schmid.
- kerndwd** Distance Weighted Discrimination (DWD) and Kernel Methods. Authors: Boxiang Wang, Hui Zou.
- keyplayer** Locating Key Players in Social Networks. Author: Weihua An; Yu-Hsin Liu.
- keypress** Wait for a Key Press in a Terminal. Author: Gabor Csardi [aut, cre].
- kineticF** Framework for the Analysis of Kinetic Visual Field Data. Author: Dipesh E Patel & Mario Cortina-Borja.
- kmeans.ddR** Distributed k-Means for Big Data using 'ddR' API. Authors: Vishrut Gupta, Arash Fard.
- knitLatex** Knitr Helpers — Mostly Tables. Author: John Shea [aut, cre]. In view: *ReproducibleResearch*.
- ksrlive** Identify Kinase Substrate Relationships Using Dynamic Data. Author: Westa Domanova.
- kwb.hantush** Calculation of Groundwater Mounding Beneath an Infiltration Basin. Author: Michael Rustler.
- labelrank** Predicting Rankings of Labels. Authors: Artur Aiguzhinov [cre], Carlos Soares [aut].
- landest** Landmark Estimation of Survival and Treatment Effect. Author: Layla Parast.
- landsat8** Landsat 8 Imagery Rescaled to Reflectance, Radiance and/or Temperature. Author: Alexandre dos Santos.

- lasvmR** A Simple Wrapper for the LASVM Solver. Author: Aydin Demircioglu.
- latex2exp** Use L^AT_EX Expressions in Plots. Author: Stefano Meschiari [aut, cre]. In view: *ReproducibleResearch*.
- lcopula** Liouville Copulas. Authors: Leo Belzile [aut, cre], Christian Genest [aut, ctb], Alexander J. McNeil [ctb], Johanna G. Neslehova [ctb].
- ldamatch** Multivariate Condition Matching by Backwards Elimination Using Linear Discriminant Analysis. Authors: Kyle Gorman [aut, cre], Geza Kiss [ctb].
- ldatuning** Tuning of the LDA Models Parameters. Author: Murzintcev Nikita [aut, cre].
- leaflet** Create Interactive Web Maps with the JavaScript ‘Leaflet’ Library. Authors: Joe Cheng [aut, cre], Yihui Xie [aut], Hadley Wickham [ctb], jQuery Foundation and contributors [ctb, cph] (jQuery library), Vladimir Agafonkin [ctb, cph] (Leaflet library), CloudMade [cph] (Leaflet library), Leaflet contributors [ctb] (Leaflet library), Leaflet Providers contributors [ctb, cph] (Leaflet Providers plugin), RStudio [cph].
- learnNN** Examples of Neural Networks. Author: Bastiaan Quast [aut, cre].
- lfda** Local Fisher Discriminant Analysis. Author: Yuan Tang with great contributions from Zachary Deane-Mayer.
- lift** Compute the Top Decile Lift and Plot the Lift Curve. Authors: Steven Hoornaert, Michel Ballings, Dirk Van den Poel.
- liftr** Dockerize R Markdown Documents. Authors: MiaoZhu Li [ctb], Tengfei Yin [ctb], Nan Xiao [aut, cre].
- likelihoodAsy** Functions for Likelihood Asymptotics. Authors: Ruggero Bellio and Donald Pierce.
- lira** Linear Regression in Astronomy. Author: Mauro Sereno.
- listWithDefaults** List with Defaults. Author: Russell S. Pierce.
- littler** R at the Command-Line via ‘r’. Author: Dirk Eddelbuettel.
- logisticPCA** Binary Dimensionality Reduction. Author: Andrew J. Landgraf.
- longurl** Expand Short URLs Using the ‘LongURL’ API. Author: Bob Rudis [aut, cre].
- loo** Efficient Leave-One-Out Cross-Validation and WAIC for Bayesian Models. Authors: Aki Vehtari [aut], Andrew Gelman [aut], Jonah Gabry [cre, aut], Juho Piironen [ctb], Ben Goodrich [ctb].
- lookupTable** Look-Up Tables using S4. Authors: Enzo Jia [aut, cre], Marc Maier [aut].
- lpbrim** LP-BRIM Bipartite Modularity. Authors: Timothee Poisot, Daniel B Stouffer.
- lqr** Robust Linear Quantile Regression. Authors: Christian E. Galarza, Luis Benites, Victor H. Lachos.
- lrgs** Linear Regression by Gibbs Sampling. Author: Adam Mantz.
- lsei** Solving Least Squares Problems under Equality/Inequality Constraints. Authors: Yong Wang [aut, cre], Charles L. Lawson [aut], Richard J. Hanson [aut].
- lsl** Latent Structure Learning. Author: Po-Hsien Huang [aut, cre].
- lucr** Currency Formatting and Conversion. Author: Oliver Keyes.
- lulcc** Land Use Change Modelling in R. Author: Simon Moulds.
- luzlogr** Lightweight Logging for R Scripts. Author: Ben Bond-Lamberty [aut, cre].

- mHG** Minimum-Hypergeometric Test. Author: Kobi Perl.
- maGUI** A Graphical User Interface for Microarray Data Analysis. Authors: Dhammapal Bharne, Praveen Kant, Vaibhav Vindal.
- magclass** Data Class and Tools for Handling Spatial-Temporal Data. Authors: Jan Philipp Dietrich, Benjamin Bodirsky, Misko Stevanovic, Lavinia Baumstark, Christoph Bertram, Markus Bonsch, Anastasis Giannousakis, Florian Humpenoeder, David Klein, Ina Neher, Michaja Pehl, Anselm Schultes.
- marketeR** Enhanced Analytics for Marketers Navigating the Ocean of Web Data. Author: Felix Mikaelian.
- markophylo** Markov Chain Models for Phylogenetic Trees. Authors: Utkarsh J. Dang and G. Brian Golding. In view: *Phylogenetics*.
- matlabr** An Interface for MATLAB using System Calls. Author: John Muschelli.
- matlib** Matrix Functions for Teaching and Learning Linear Algebra and Multivariate Statistics. Authors: Michael Friendly [aut, cre], John Fox [ctb], Georges Monette [ctb].
- mcemGLM** Maximum Likelihood Estimation for Generalized Linear Mixed Models. Author: Felipe Acosta Archila.
- merTools** Tools for Analyzing Mixed Effect Regression Models. Authors: Jared E. Knowles [aut, cre], Carl Frederick [aut].
- meta4diag** Meta-Analysis for Diagnostic Test Studies. Authors: Jingyi Guo and Andrea Riebler. In view: *MetaAnalysis*.
- metaSEM** Meta-Analysis using Structural Equation Modeling. Author: Mike W.-L. Cheung. In view: *MetaAnalysis*.
- metafuse** Fused Lasso Approach in Regression Coefficient Clustering. Authors: Lu Tang, Peter X.K. Song.
- metansue** Meta-Analysis of Studies with Non Statistically-Significant Unreported Effects. Author: Joaquim Radua.
- meteR** Fitting and Plotting Tools for the Maximum Entropy Theory of Ecology (METE). Authors: Andy Rominger, Cory Merow.
- meteo** Spatio-Temporal Analysis and Mapping of Meteorological Observations. Authors: Milan Kilibarda, Aleksandar Sekulic, Tomislav Hengl, Edzer Pebesma, Benedikt Graeler.
- metricsgraphics** Create Interactive Charts with the JavaScript 'MetricsGraphics' Library. Authors: Bob Rudis [aut, cre], Ali Almosawi [ctb, cph] (MetricsGraphics library), Hamilton Ulmer [ctb, cph] (MetricsGraphics library), Mozilla [cph] (MetricsGraphics library), jQuery Foundation and contributors [ctb, cph] (jQuery library).
- mev** Multivariate Extreme Value Distributions. Author: Leo Belzile [aut, cre].
- mgm** Estimating Mixed Graphical Models. Author: Jonas Haslbeck.
- mhde** Minimum Hellinger Distance Test for Normality. Authors: Paul W. Eslinger [aut, cre], Heather Orr [aut, ctb].
- midrangeMCP** Multiples Comparisons Procedures Based on Studentized Midrange and Range Distributions. Authors: Ben Deivide [cre], Daniel Furtado [aut].
- missDeaths** Correctly Analyse Disease Recurrence with Missing at Risk Information using Population Mortality. Authors: Tomaz Stupnik [aut, cre], Maja Pohar Perme [aut].

- mixtox** Curve Fitting and Mixture Toxicity Assessment. Author: Xiangwei Zhu.
- mlVAR** Multi-Level Vector Autoregression. Authors: Sacha Epskamp, Marie K. Deserno and Laura F. Bringmann. In view: *TimeSeries*.
- mlDR.datasets** R Ultimate Multilabel Dataset Repository. Authors: David Charle [cre], Francisco Charle [aut].
- mlma** Multilevel Mediation Analysis. Authors: Qingzhao Yu, Bin Li.
- mlsjunkgen** Use the MLS Junk Generator Algorithm to Generate a Stream of Pseudo-Random Numbers. Author: Steve Myles [aut, cre].
- mmc** Multivariate Measurement Error Correction. Author: Jaejoon Song.
- mmtfa** Model-Based Clustering and Classification with Mixtures of Modified t Factor Analyzers. Authors: Jeffrey L. Andrews, Paul D. McNicholas, and Mathieu Chalifour.
- modQR** Multiple-Output Directional Quantile Regression. Authors: Miroslav Šiman [aut], Pavel Boček [aut, cre].
- modelObj** A Model Object Framework for Regression Analysis. Author: Shannon T. Holloway.
- mogavs** Multiobjective Genetic Algorithm for Variable Selection in Regression. Authors: Tommi Pajala [aut, cre], Pekka Malo [aut], Ankur Sinha [aut], Timo Kuosmanen [ctb].
- molaR** Dental Surface Complexity Measurement Tools. Authors: James D. Pampush [aut, cre, cph], Julia M. Winchester [aut, cph], Paul E. Morse [aut, cph], Alexander Q. Vining [aut, cph].
- momr** Mining Metaomics Data (MetaOMiner). Authors: Edi Prifti, Emmanuelle Le Chate-lier.
- monogeneaGM** Geometric Morphometric Analysis of Monogenean Anchors. Author: Tsung Fei Khang.
- monographaR** Taxonomic Monographs Tools. Author: Marcelo Reginato.
- moveHMM** Animal Movement Modelling using Hidden Markov Models. Authors: Theo Michelot, Roland Langrock, Toby Patterson, Eric Rexstad. In view: *SpatioTemporal*.
- mplot** Graphical Model Stability and Variable Selection Procedures. Authors: Garth Tarr [aut, cre], Samuel Mueller [aut], Alan Welsh [aut].
- mri** Modified Rand Index (1 and 2.1 and 2.2) and Modified Adjusted Rand Index (1 and 2.1 and 2.2). Author: Marjan Cugmas.
- ms.sev** Package for Calculation of ARMSS, Local MSSS and Global MSSS. Authors: Helga Westerlind, Ali Manouchehrinia.
- multiwave** Estimation of Multivariate Long-Memory Models Parameters. Authors: Sophie Achard [aut, cre], Irene Gannaz [aut].
- mvQuad** Methods for Multivariate Quadrature. Author: Constantin Weiser (HHU of Duesseldorf / Germany). In view: *NumericalMathematics*.
- mvtboost** Tree Boosting for Multivariate Outcomes. Author: Patrick Miller [aut, cre].
- nbconvertR** Vignette Engine Wrapping IPython Notebooks. Author: Philipp Angerer.
- nhanesA** NHANES Data Retrieval. Author: Christopher Endres.
- nivm** Noninferiority Tests with Variable Margins. Author: Michael P. Fay.

- nlnet** Nonlinear Network Reconstruction and Clustering Based on DCOL (Distance Based on Conditional Ordered List). Authors: Haodong Liu, Tianwei Yu.
- nlrr** Non-Linear Relative Risk Estimation and Plotting. Author: Yiqiang Zhan [aut, cre].
- nomclust** Hierarchical Nominal Clustering Package. Authors: Sulc Zdenek, Rezankova Hana.
- nparACT** Non-Parametric Measures of Actigraphy Data. Author: Christine Blume Nayan-tara Santhi Manuel Schabus.
- npregfast** Nonparametric Estimation of Regression Models with Factor-by-Curve Interactions. Authors: Marta Sestelo [aut, cre], Nora M. Villanueva [aut], Javier Roca-Pardinas [aut].
- npsf** Nonparametric and Stochastic Efficiency and Productivity Analysis. Authors: Oleg Badunenko [aut, cre], Yaryna Kolomyitseva [aut], Pavlo Mozharovskyi [aut].
- npsurv** Non-Parametric Survival Analysis. Author: Yong Wang.
- oaColors** OpenAnalytics Colors Package. Author: Jason Waddell.
- oaPlots** OpenAnalytics Plots Package. Authors: Jason Waddell, Willem Ligtenberg.
- oai** General Purpose 'Oai-PMH' Services Client. Author: Scott Chamberlain [aut, cre].
- oapackage** Orthogonal Array Package. Author: Pieter Thijs Eendebak. In view: *ExperimentalDesign*.
- odds.converter** Betting Odds Conversion. Author: Marco Blume.
- oglmx** Estimation of Ordered Generalized Linear Models. Author: Nathan Carroll.
- olctools** Open Location Code Handling in R. Author: Oliver Keyes.
- onewaytests** One-Way Independent Groups Design. Authors: Osman Dag, Anil Dolgun, N. Meric Konar.
- optCluster** Determine Optimal Clustering Algorithm and Number of Clusters. Authors: Michael Sekula, Somnath Datta, and Susmita Datta.
- optigrab** Command-Line Parsing for an R World. Author: Christopher Brown.
- optimixture** Optimal Mixture Weights in Multiple Importance Sampling. Authors: Hera Y. He, Art B. Owen.
- ordinalNet** Penalized Ordinal Regression. Author: Mike Wurm [aut, cre].
- osrm** Interface Between R and the OpenStreetMap-Based Routing Service OSRM. Author: Timothée Giraud [cre, aut].
- pAnalysis** Benchmarking and Rescaling R2 using Noise Percentile Analysis. Authors: Joseph G Kreke, Sangeet Khemlani, Greg Trafton.
- packagetrackr** Track R Package Downloads from RStudio's CRAN Mirror. Author: Jirka Lewandowski.
- packcircles** Circle Packing. Authors: Michael Bedward [aut, cre], David Eppstein [aut] (Original author of Python code for graph-based circle packing ported to C++ for this package).
- paco** Procrustes Application to Cophylogenetic Analysis. Authors: Juan Antonio Balbuena, Timothee Poisot, Matthew Hutchinson, Fernando Cagua.
- pageviews** An API Client for Wikimedia Traffic Data. Author: Oliver Keyes.

- palettetown** Use Pokemon Inspired Colour Palettes. Author: Tim Lucas.
- palr** Colour Palettes for Data. Author: Michael D. Sumner [aut, cre].
- pangae** Client for the 'Pangaea' Database. Authors: Scott Chamberlain [aut, cre], Kara Woo [aut], Andrew MacDonald [aut], Naupaka Zimmerman [aut], Gavin Simpson [aut].
- parallelML** A Parallel-Voting Algorithm for many Classifiers. Author: Wannes Rosiers (InfoFarm).
- params** Simplify Parameters. Authors: Sahil Seth [aut, cre], Yihui Xie [ctb] (kable from knitr R/table.R).
- parsec** Partial Orders in Socio-Economics. Authors: Alberto Arcagni [aut, cre], Marco Fattore [ctb].
- patPRO** Visualizing Temporal Microbiome Data. Authors: Hannigan GD, Loesche MA, Hodkinson BP, Mehta S, Grice EA.
- pbZMQ** Programming with Big Data – Interface to ZeroMQ. Authors: Wei-Chen Chen [aut, cre], Drew Schmidt [aut], Whit Armstrong [ctb] (some functions are modified from the rzmq for backward compatibility), Brian Ripley [ctb] (C code of shellexec), R Core team [ctb] (some functions are modified from the R source code).
- pcadapt** Principal Component Analysis for Outlier Detection. Authors: Keurcien Luu, Michael G.B. Blum.
- pch** Piecewise Constant Hazards Models for Censored and Truncated Data. Author: Paolo Frumento.
- pco** Panel Cointegration Tests. Author: Georgi Marinov.
- personograph** Pictographic Representation of Treatment Effects. Authors: Joel Kuiper [aut, cre], Iain Marshall [aut].
- phonenum** Convert Letters to Numbers and Back as on a Telephone Keypad. Author: Steve Myles [aut, cre].
- phyext2** An Extension (for Package 'SigTree') of Some of the Classes in Package 'phylobase'. Author: J. Conrad Stack.
- phylogenetics** Estimating Statistical Errors of Phylogenetic Metrics. Authors: Xia Hua, Lindell Bromham.
- phylosignal** Exploring the Phylogenetic Signal in Continuous Traits. Author: Francois Keck.
- phyndr** Matches Tip and Trait Data. Authors: Rich FitzJohn, Matt Pennell and Will Cornwall.
- pid** Process Improvement using Data. Author: Kevin Dunn [aut, cre].
- piecewiseSEM** Piecewise Structural Equation Modeling. Author: Jon Lefcheck.
- pinnacle.API** A Wrapper for the Pinnacle Sports API. Authors: Marco Blume, Nicholas Jhirad, Amine Gasseem.
- pixiedust** Tables so Beautifully Fine-Tuned You Will Believe It's Magic. Author: Benjamin Nutter [aut, cre].
- pkgconfig** Private Configuration for R Packages. Author: Gabor Csardi.
- pla** Parallel Line Assays. Author: Jens Henrik Badsberg.

- plfMA** A GUI to View, Design and Export Various Graphs of Data. Authors: Dhammapal Bharne, Vaibhav Vindal.
- plotly** Create Interactive Web Graphics via Plotly's JavaScript Graphing Library. Authors: Carson Sievert [aut, cre], Chris Parmer [aut, cph], Toby Hocking [aut], Scott Chamberlain [aut], Karthik Ram [aut], Marianne Corvellec [aut], Pedro Despouy [aut].
- pnea** Parametric Network Enrichment Analysis. Authors: Mirko Signorelli, Veronica Vinciotti and Ernst C. Wit.
- pnf** Prime Numbers and Integer Factorization. Author: Abby Rothway.
- poisson** Simulating Homogenous & Non-Homogenous Poisson Processes. Authors: Kristian Brock [aut], Daniel Slade [ctb].
- polyfreqs** Bayesian Population Genomics in Autopolyploids. Author: Paul Blischak [aut, cre].
- popEpi** Functions for Epidemiological Analysis using Population Data. Authors: J Miettinen, M Rantanen, K Seppa, J Pitkaniemi.
- popprxl** Read GenALEx Files Directly from Excel. Author: Zhian N. Kamvar [cre, aut].
- praise** Praise Users. Authors: Gabor Csardi, Sindre Sorhus.
- prclust** Penalized Regression-Based Clustering Method. Authors: Chong Wu, Wei Pan.
- prepdatt** Preparing Experimental Data for Statistical Analysis. Authors: Ayala S. Allon [aut, cre], Roy Luria [aut], Jim Grange [ctb], Nachshon Meiran [ctb].
- preprocomb** Tools for Preprocessing Combinations. Author: Markus Vattulainen.
- prettymapr** Scale Bar, North Arrow, and Pretty Margins in R. Author: Dewey Dunnington.
- primes** Generate and Test for Prime Numbers. Author: Oliver Keyes.
- prism** Access Data from the Oregon State Prism Climate Project. Authors: Hart Edmund [aut, cre], Kendon Bell [aut].
- pro** Point-Process Response Model for Optogenetics. Authors: Xi (Rossi) LUO with contributions from Dylan Small and Vikaas Sohal.
- profilr** Quickly Profile Data in R. Author: Paul Hendricks [aut, cre].
- progenyClust** Finding the Optimal Cluster Number Using Progeny Clustering. Author: C.W. Hu.
- prop.comb.RR** Analyzing Combination of Proportions and Relative Risk. Authors: Maria Alvarez and Javier Roca-Pardinas.
- proton** The Proton Game. Authors: Przemysław Biecek [aut, cre], Witold Chodor [trl], Foundation SmarterPoland.pl [cph].
- prozor** Minimal Protein Set Explaining Peptide Spectrum Matches. Author: Witold Wolski.
- pscore** Standardizing Physiological Composite Risk Endpoints. Author: Joshua F. Wiley.
- ptycho** Bayesian Variable Selection with Hierarchical Priors. Authors: Laurel Stell and Chiara Sabatti.
- purge** Purge Training Data from Models. Authors: Marc Maier [cre], Chaoqun Jia [ctb], MassMutual Advanced Analytics [aut].
- purrr** Functional Programming Tools. Authors: Hadley Wickham [aut, cre], Lionel Henry [ctb], RStudio [cph].

- pweight** P-Value Weighting. Authors: Edgar Dobriban [aut, cre], Kristen Fortney [aut].
- pwrRasch** Statistical Power Simulation for Testing the Rasch Model. Authors: Takuya Yanagida [cre, aut], Jan Steinfeld [aut], Thomas Kiefer [ctb]. In view: *Psychometrics*.
- pystR** Python String Methods in R. Author: Nicole White.
- qap** Heuristics for the Quadratic Assignment Problem (QAP). Authors: Michael Hahsler [aut, cre, cph], Franz Rendl [ctb, cph]. In view: *Optimization*.
- qlcData** Processing Data for Quantitative Language Comparison (QLC). Author: Michael Cyosuw.
- qlcVisualize** Visualization for Quantitative Language Comparison (QLC). Author: Michael Cysouw.
- qrage** Tools that Create D3 JavaScript Force Directed Graph from R. Authors: Shingo Yamamoto [aut, cre], RStudio, Inc. [cph], Michael Bostock [ctb, cph] (D3.js library), jQuery Foundation [cph] (jQuery library and jQuery UI library), jQuery contributors [ctb, cph] (jQuery library), jQuery UI contributors [ctb, cph] (jQuery UI library).
- qrcode** QRcode Generator for R. Author: Victor Teh.
- qrjoint** Joint Estimation in Linear Quantile Regression. Author: Surya Tokdar.
- qtlcharts** Interactive Graphics for QTL Experiments. Authors: Karl W Broman [aut, cre], Michael Bostock [ctb, cph] (d3.js library in htmlwidgets/lib), Justin Palmer [ctb, cph] (d3.tip library in htmlwidgets/lib), Cynthia Brewer [cph] (ColorBrewer library in htmlwidgets/lib), Mark Harrower [cph] (ColorBrewer library in htmlwidgets/lib), The Pennsylvania State University [cph] (ColorBrewer library in htmlwidgets/lib), jQuery Foundation [cph] (jQuery library in htmlwidgets/lib), jQuery contributors [ctb] (jQuery library in htmlwidgets/lib), jQuery UI contributors [ctb] (jQuery UI library in htmlwidgets/lib).
- qualvar** Implements Indices of Qualitative Variation Proposed by Wilcox (1973). Author: Joel Gombin.
- quantable** Streamline Descriptive Analysis of Quantitative Data Matrices. Author: Witold Wolski.
- quantileDA** Quantile Classifier. Authors: Christian Hennig, Cinzia Viroli.
- quickmapr** Quickly Map and Explore Spatial Data. Author: Jeffrey W. Hollister [aut, cre].
- qut** Quantile Universal Threshold. Authors: Jairo Diaz, Sylvain Sardy, Caroline Giacobino, Nick Hengartner.
- rAmCharts** JavaScript Charts API Tool. Authors: Jeffery Petit [aut, cre], Antanas Marcellionis [aut, cph] ('AmCharts' library in the directory htmlwidgets/lib/amcharts), Benoit Thieurmél [aut, ctb], DataKnowledge [ctb] (See official web site at <http://www.datak.fr>).
- rGroovy** Groovy Language Integration. Author: Thomas P. Fuller.
- rPowerSampleSize** Sample Size Computations Controlling the Type-II Generalized Family-Wise Error Rate. Authors: Pierre Lafaye de Micheaux, Benoit Liqueur and Jeremie Riou.
- radiomics** Radiomic Image Processing Toolbox. Author: Joel Carlson.
- rafalib** Convenience Functions for Routine Data Exploration. Authors: Rafael A. Irizarry and Michael I. Love.

- randomForest.ddR** Distributed 'randomForest' for Big Data using 'ddR' API. Authors: Vishrut Gupta, Arash Fard, Winston Li, Matthew Saltz.
- randomizeR** Randomization for Clinical Trials. Authors: Thi Mui Pham [ctb], David Schindler [aut], Diane Uschner [aut, cre].
- ranger** A Fast Implementation of Random Forests. Author: Marvin N. Wright. In view: *MachineLearning*.
- rase** Range Ancestral State Estimation for Phylogeography and Comparative Analyses. Authors: Ignacio Quintero [aut, cre], Forrest W. Crawford [aut], Petr Keil [aut].
- rcanvec** Access and Plot CanVec and CanVec+ Data for Rapid Basemap Creation in Canada. Author: Dewey Dunnington.
- rches** Chess Move, Generation/Validation, Piece Placement/Movement, and Check/Checkmate/Stalemate Detection. Author: Joshua Kunst.
- rcrypt** Symmetric File Encryption Using GPG. Author: Brett Klamer [aut, cre].
- rddtools** Toolbox for Regression Discontinuity Design ('RDD'). Authors: Matthieu Stigler [aut], Bastiaan Quast [aut, cre].
- reReg** Recurrent Event Regression. Author: Sy Han (Steven) Chiou.
- recoder** A Simple and Flexible Recoder. Author: Ali Sanaei.
- reda** Recurrent Event Data Analysis. Authors: Wenjie Wang [aut, cre], Haoda Fu [aut], Jun Yan [ctb].
- refund.shiny** Interactive Plotting for Functional Data Analyses. Authors: Julia Wrobel [aut, cre], Jeff Goldsmith [aut].
- relen** Compute Relative Entropy. Author: Soeren Braehmer.
- repijson** Tools for Handling EpiJSON (Epidemiology Data) Files. Authors: Andy South [aut, cre], Thomas Finnie [aut], Ellie Sherrard-Smith [aut], Ana Bento [aut], Thibaut Jombart [aut].
- repo** A Resource Manager for R Objects. Author: Francesco Napolitano.
- reservoir** Tools for Analysis, Design, and Operation of Water Supply Storages. Authors: Sean Turner [aut, cre], Stefano Galelli [aut].
- resumer** Build Resumes with R. Author: Jared Lander [aut, cre]. In view: *ReproducibleResearch*.
- geolocate** IP Address Geolocation. Authors: Oliver Keyes [aut, cre], Drew Schmidt [aut], David Robinson [ctb], Maxmind, Inc. [cph], Pascal Gloor [cph].
- rglwidget** 'rgl' in 'htmlwidgets' Framework. Author: Duncan Murdoch.
- rhandsontable** Interface to the 'Handsontable.js' Library. Authors: Jonathan Owen [aut, cre, cph], Jeff Allen [ctb], Yihui Xie [ctb], Enzo Martoglio [ctb], Warpechowski Marcin [ctb, cph] (Handsontable.js library), Handsoncode sp. z o.o. [ctb, cph] (Handsontable.js library), Aisch Gregor [ctb, cph] (Chroma.js library), Wood Tim [ctb, cph] (Moment.js library), Chernev Iskren [ctb, cph] (Moment.js library), Moment.js contributors [ctb, cph] (Moment.js library), Bushell David [ctb, cph] (Pikaday.js library), jQuery Foundation [ctb, cph] (jQuery.js library), Splunk Inc [ctb, cph] (Sparkline.js library).
- ridigbio** Interface to the iDigBio Data API. Authors: Francois Michonneau [aut, cph], Matthew Collins [aut, cre], Scott Chamberlain [ctb].
- riskR** Risk Management. Author: Marcelo Brutti Righi.

- rleafmap** Interactive Maps with R and Leaflet. Author: Francois Keck.
- rnetcarto** Fast Network Modularity and Roles Computation by Simulated Annealing (Rgraph C Library Wrapper for R). Authors: Guilhem Doulier [aut, cre] (R bindings, current implementation of the simulated annealing algorithm), Roger Guimera [ctb] (Author of the original rgraph library), Daniel B. Stouffer [aut, ths].
- rnn** Recurrent Neural Network. Author: Bastiaan Quast [aut, cre].
- rollply** Moving-Window Add-on for 'plyr'. Author: Alexandre Genin.
- rosm** Plot Raster Map Tiles from Open Street Map and Other Sources. Authors: Dewey Dunnington [aut, cre], Timothée Giraud [ctb].
- rotl** Interface to the 'Open Tree of Life' API. Authors: Francois Michonneau [aut, cre], Joseph Brown [aut], David Winter [aut].
- rpca** RobustPCA: Decompose a Matrix into Low-Rank and Sparse Components. Author: Maciek Sykulski [aut, cre].
- rpdo** Pacific Decadal Oscillation Index. Authors: Joe Thorley [aut, cre], Nathan Mantua [aut, dtc], Steven R. Hare [aut, dtc].
- rpivotTable** Build Powerful Pivot Tables and Dynamically Slice & Dice your Data. Authors: Enzo Martoglio [aut, cre] (R interface), Nicolas kruchten [ctb, cph] (pivottable library).
- rpnf** Point and Figure Package. Author: Sascha Herrmann.
- rrepast** Invoke 'Repast Symphony' Simulation Models. Authors: Antonio Prestes Garcia [aut, cre], Alfonso Rodriguez-Paton [aut, ths].
- rscopus** Scopus Database API Interface. Author: John Muschelli.
- rsggm** Robust Sparse Gaussian Graphical Modeling via the Gamma-Divergence. Author: Kei Hirose.
- rstan** R Interface to Stan. Authors: Jiqiang Guo [aut], Daniel Lee [ctb], Krzysztof Sakrejda [ctb], Jonah Gabry [aut], Ben Goodrich [cre, aut], Joel de Guzman [cph] (Boost), Eric Niebler [cph] (Boost), Thomas Heller [cph] (Boost), John Fletcher [cph] (Boost). In view: *Bayesian*.
- rstatscn** R Interface for China National Data. Author: Xuehui YANG.
- rstpm2** Flexible Link-Based Survival Models. Authors: Mark Clements [aut, cre], Xing-Rong Liu [aut], Paul Lambert [ctb].
- rsvd** Randomized Singular Value Decomposition. Author: N. Benjamin Erichson [aut, cre].
- rtimes** Client for New York Times APIs. Author: Scott Chamberlain [aut, cre].
- rtkore** STK++ Core Library Integration to R using Rcpp. Authors: Serge Iovleff [aut, cre], Parmeet Bhatia [ctb].
- rtson** Typed JSON. Author: Alexandre Maurel.
- runitotestthat** Convert 'RUnit' Test Functions into 'testthat' Tests. Author: Richard Cotton [aut, cre].
- rusda** Interface to USDA Databases. Author: Franz-Sebastian Krah.
- rwirelesscom** Basic Wireless Communications Simulation. Author: Alberto Gutierrez [aut, cre].
- rwunderground** R Interface to Weather Underground API. Author: Alex Shum.

- sSDR** Tools Developed for Structured Sufficient Dimension Reduction (sSDR). Authors: Yang Liu, Francesca Chiaromonte, Bing Li.
- sValues** Measures of the Sturdiness of Regression Coefficients. Author: Carlos Cinelli.
- satellite** Various Functions for Handling and Manipulating Remote Sensing Data. Authors: Thomas Nauss, Hanna Meyer, Florian Detsch, Tim Appelhans.
- sbmSDP** Semidefinite Programming for Fitting Block Models of Equal Block Sizes. Author: Arash A. Amini.
- scatterD3** D3 JavaScript Scatterplot from R. Author: Julien Barnier [aut, cre].
- schumaker** Schumaker Shape-Preserving Spline. Authors: Stuart Baumann [aut, cre], Margaryta Klymak[ctb].
- scmamp** Statistical Comparison of Multiple Algorithms in Multiple Problems. Authors: Borja Calvo [aut, cre], Guzman Santafe [aut].
- score** A Package to Score Behavioral Questionnaires. Author: Jaejoon Song.
- scorer** Quickly Score Models. Author: Paul Hendricks [aut, cre].
- sdPrior** Scale-Dependent Hyperpriors in Structured Additive Distributional Regression. Author: Nadja Klein.
- searchConsoleR** Google Search Console APIv3 R Client. Authors: Mark Edmondson [aut, cre], Jennifer Bryan [ctb].
- seelickfixr** Access Data from the SeeClickFix Web API. Authors: Justin de Benedictis-Kessner [aut, cre], Christian Lemp [ctb].
- seismic** Predict Information Cascade by Self-Exciting Point Process. Authors: Hera He, Murat Erdogdu, Qingyuan Zhao.
- sejmRP** An Information About Deputies and Votings in Polish Diet. Authors: Piotr Smuda [aut, cre], Przemyslaw Biecek [aut], Tomasz Mikolajczyk [ctb].
- selectiveInference** Tools for Selective Inference. Authors: Ryan Tibshirani, Rob Tibshirani, Jonathan Taylor, Joshua Loftus, Stephen Reid.
- sgRSEA** Enrichment Analysis of CRISPR/Cas9 Knockout Screen Data. Authors: Jungsik Noh, Beibei Chen.
- shinystan** Interactive Visual and Numerical Diagnostics and Posterior Analysis for Bayesian Models. Authors: Jonah Gabry [aut, cre], Stan Development Team [ctb], Michael Andrae [ctb], Michael Betancourt [ctb], Bob Carpenter [ctb], Yuanjun Gao [ctb], Andrew Gelman [ctb], Ben Goodrich [ctb], Daniel Lee [ctb], Dongying Song [ctb], Rob Trangucci [ctb].
- signalHsmm** Predict Presence of Signal Peptides. Authors: Michal Burdukiewicz [cre, aut], Piotr Sobczyk [aut].
- simest** Constrained Single Index Model Estimation. Authors: Arun Kumar Kuchibhotla, Rohit Kumar Patra.
- simmer** Just Let it Simmer. Authors: Bart Smeets [aut], Iñaki Ucar [aut, cre].
- simmr** A Stable Isotope Mixing Model. Author: Andrew Parnell.
- simplr** Basic Symbolic Expression Simplification. Authors: Oliver Flasch [aut, cre], Felix Gorschluerer [aut], Leo Liberti [ctb].
- simr** Power Analysis for Generalised Linear Mixed Models by Simulation. Authors: Peter Green, Catriona MacLeod.

- sinaplot** An Enhanced Chart for Simple and Truthful Representation of Single Observations over Multiple Classes. Authors: Nikos Sidiropoulos [aut, cre], Sina Hadi Sohi [aut], Nicolas Rabin [aut], Frederik Otzen Bagger [aut].
- sisal** Sequential Input Selection Algorithm. Author: Mikko Korpela [aut, cre].
- smallarea** Fits a Fay Herriot Model. Author: Abhishek Nandy.
- smerc** Statistical Methods for Regional Counts. Author: Joshua French.
- smint** Smooth Multivariate Interpolation for Gridded and Scattered Data. Authors: Yves Deville Yann Richet. Fortran codes by William Thacker, Manjula Iyer Jingwei Zhang, Laynet Watson, Jeffrey Birch, Manjula Iyer, Michael Berry and Robert Renka. Fortran codes by Alain Hebert.
- snm** Stabilized Nearest Neighbor Classifier. Authors: Wei Sun, Xingye Qiao, and Guang Cheng.
- sodavis** SODA: Main and Interaction Effects Selection for Discriminant Analysis and Logistic Regression. Authors: Yang Li, Jun S. Liu.
- sodium** A Modern and Easy-to-Use Crypto Library. Author: Jeroen Ooms.
- solidearthtide** Solid Earth Tide Computation. Authors: Jose Gama [aut, cre], Dennis Milbert [aut, cph].
- spTDyn** Spatially Varying and Spatio-Temporal Dynamic Linear Models. Authors: K. Shuvo Bakar, Philip Kokic, Huidong Jin.
- spanel** Spatial Panel Data Models. Author: Taha Zaghdoudi.
- sparsereg** Sparse Bayesian Models for Regression, Subgroup Analysis, and Panel Data. Authors: Marc Ratkovic and Dustin Tingley.
- spatialfil** Application of 2D Convolution Kernel Filters to Matrices or 3D Arrays. Authors: Nicola Dinapoli, Roberto Gatta.
- spduration** Split-Population Duration (Cure) Regression. Authors: Andreas Beger [aut, cre], Daina Chiba [aut], Daniel Hill [aut], Nils Metternich [aut], Shahryar Minhas [aut], Michael Ward [cph].
- speciesgeocodeR** Prepare Species Distributions for the Use in Phylogenetic Analyses. Author: Alexander Zizka [aut, cre].
- specmine** Metabolomics and Spectral Data Analysis and Mining. Authors: Christopher Costa, Marcelo Maraschin, Miguel Rocha.
- spectrino** Spectra Visualization, Organizer and Data Preparation. Author: Teodor Krastev.
- spinyReg** Sparse Generative Model and Its EM Algorithm. Authors: Charles Bouveyron, Julien Chiquet, Pierre Latouche, Pierre-Alexandre Mattei.
- spm12r** Wrapper Functions for SPM (Statistical Parametric Mapping) Version 12 from the Wellcome Trust Centre for Neuroimaging. Author: John Muschelli.
- spoccutils** Utilities for Use with 'spocc'. Author: Scott Chamberlain [aut, cre].
- spsann** Optimization of Sample Configurations using Spatial Simulated Annealing. Authors: Alessandro Samuel-Rosa [aut, cre], Lucia Helena Cunha dos Anjos [ths], Gustavo de Mattos Vasques [ths], Gerard B M Heuvelink [ths], Edzer Pebesma [ctb], Jon Skoien [ctb], Joshua French [ctb], Pierre Roudier [ctb], Dick Brus [ctb], Murray Lark [ctb].

- spsi** Shape-Preserving Uni-Variate and Bi-Variate Spline Interpolation. Authors: Szymon Sacher & Andrew Clausen. Excerpts adapted from Fortran code Copyright (C) Paolo Costantini.
- sscor** Robust Correlation Estimation and Testing Based on Spatial Signs. Authors: Alexander Duerre [aut, cre], Daniel Vogel [aut].
- starma** Modelling Space Time AutoRegressive Moving Average (STARMA) Processes. Author: Felix Cheysson.
- stationaRy** Get Hourly Meteorological Data from Global Stations. Author: Richard Iannone [aut, cre].
- statnetWeb** A Graphical User Interface for Network Modeling with ‘Statnet’. Authors: Emily Beylerian [cre, aut], Kirk Li [ctb], Samuel Jenness [ctb], Martina Morris [ctb].
- steadyICA** ICA and Tests of Independence via Multivariate Distance Covariance. Authors: Benjamin B. Risk and Nicholas A. James and David S. Matteson.
- stmBrowser** Structural Topic Model Browser. Authors: Michael K. Freeman, Jason Chuang, Margaret E. Roberts, Brandon M. Stewart and Dustin Tingley.
- stplanr** Sustainable Transport Planning. Authors: Robin Lovelace [aut, cre], Richard Ellison [aut] (Author of various functions), Barry Rowlingson [aut] (Author of overline), Nick Bearman [aut] (Co-author of gclip).
- stringgaussnet** PPI and Gaussian Network Construction from Transcriptomic Analysis Results Integrating a Multilevel Factor. Authors: Emmanuel Chaplais, Henri-Jean Garchon.
- subscore** SubScore Computing Functions in Classical Test Theory. Authors: Shenghai Dai [aut, cre], Xiaolin Wang [aut], Dubravka Svetina [aut].
- subspace** Interface to OpenSubspace. Authors: Marwan Hassani [aut, cre], Matthias Hansen [aut], Emmanuel Müller [ctb], Ira Assent [ctb], Stephan Günemann [ctb], Timm Jansen [ctb], Thomas Seidl [ctb], University of Waikato [ctb, cph].
- surveyeditor** Generate a Survey that can be Completed by Survey Respondents. Author: Char Leung.
- surveyplanning** Survey Planning Tools. Authors: Juris Breidaks [aut, cre], Martins Liberts [aut], Janis Jukams [aut].
- svgPanZoom** R ‘Htmlwidget’ to Add Pan and Zoom to Almost any R Graphic. Authors: Anders Riutta et. al. [aut, cph] (svg-pan-zoom.js BSD-licensed library in htmlwidgets/lib), Jorik Tangelder [aut, cph] (hammer.js MIT-licensed touch library in htmlwidgets/lib), Kent Russell [aut, cre] (R interface to svg-pan-zoom.js).
- svs** Tools for Semantic Vector Spaces. Author: Koen Plevoets [aut, cre].
- swirlify** A Toolbox for Writing ‘swirl’ Courses. Authors: Sean Kross [aut, cre], Nick Carchedi [aut], Chih-Cheng Liang [ctb], Wush Wu [ctb].
- switchr** Installing, Managing, and Switching Between Distinct Sets of Installed Packages. Author: Gabriel Becker [aut, cre].
- switchrGist** Publish Package Manifests to GitHub Gists. Author: Gabriel Becker [aut, cre].
- taber** Split and Recombine Your Data. Author: Seth Wenchel [aut, cre, cph].
- tablaxlsx** Write Formatted Tables in Excel Workbooks. Author: Jesus Maria Rodriguez Rodriguez.

- tailloss** Estimate the Probability in the Upper Tail of the Aggregate Loss Distribution. Authors: Isabella Gollini [aut, cre], Jonathan Rougier [ctb].
- textreuse** Detect Text Reuse and Document Similarity. Author: Lincoln Mullen [aut, cre]. In view: *NaturalLanguageProcessing*.
- tgcd** Thermoluminescence Glow Curve Deconvolution. Authors: Jun Peng [aut, cre], Jorge More [ctb], Burton Garbow [ctb], Kenneth Hillstrom [ctb], John Burkardt [ctb], Linda R. Petzold [ctb], Alan C. Hindmarsh [ctb], R. Woodrow Setzer [ctb].
- tg1m** Binary Regressions under Independent Student-t Priors. Author: Yingbo Li.
- threewords** Represent Precise Coordinates in Three Words. Author: Oliver Keyes.
- tigris** Load Census TIGER/Line Shapefiles into R. Authors: Kyle Walker [aut, cre], Bob Rudis [ctb].
- timedelay** Time Delay Estimation for Stochastic Time Series of Gravitationally Lensed Quasars. Authors: Hyungsuk Tak, Kaisey Mandel, David A. van Dyk, Vinay L. Kashyap, Xiao-Li Meng, and Aneta Siemiginowska.
- titanic** Titanic Passenger Survival Data Set. Author: Paul Hendricks [aut, cre].
- tmlenet** Targeted Maximum Likelihood Estimation for Network Data. Authors: Oleg Sofrygin [aut, cre], Mark J. van der Laan [aut].
- tmod** Transcriptional Module Analysis. Author: January Weiner.
- tmvnsim** Truncated Multivariate Normal Simulation. Author: Samsiddhi Bhattacharjee.
- tnam** Temporal Network Autocorrelation Models (TNAM). Authors: Philip Leifeld [aut, cre], Skyler J. Cranmer [ctb].
- tolBasis** Fundamental Definitions and Utilities of the Time Oriented Language (TOL). Author: Pedro Gea.
- tracheideR** Standardize Tracheidograms. Author: Filipe Campelo.
- traits** Species Trait Data from Around the Web. Authors: Scott Chamberlain [aut, cre], Zachary Foster [aut], Ignasi Bartomeus [aut], David LeBauer [aut], David Harris [aut].
- transcribeR** Automated Transcription of Audio Files Through the HP IDOL API. Authors: Christopher Lucas, Dean Knox, Dustin Tingley, Thomas Scanlan, Shiv Sunil, Michael May, Angela Su.
- translateSPSS2R** Toolset for Translating SPSS-Syntax to R-Code. Authors: Andreas Wygrabek [aut, cre], Bastian Wiessner [aut], eoda GmbH [cph].
- translation.ko** R Manuals Literally Translated in Korean. Authors: Chel Hee Lee [aut, cre], Edward Kang [ctb], Sunyoung Kim [ctb], Heather Kim [ctb].
- treescape** Statistical Exploration of Landscapes of Phylogenetic Trees. Authors: Thibaut Jombart [aut], Michelle Kendall [aut, cre], Jacob Almagro-Garcia [aut], Caroline Colijn [aut].
- trib** Analysing and Visualizing Tribology Measurements. Authors: Gokce Mehmet Ay [aut, cre], Osman Nuri Celik [ths].
- trimr** An Implementation of Common Response Time Trimming Methods. Author: James Grange [aut, cre].
- tsPI** Improved Prediction Intervals for ARIMA Processes and Structural Time Series. Author: Jouni Helske. In view: *TimeSeries*.

- tseriesEntropy** Entropy Based Analysis and Tests for Time Series. Author: Simone Giannerini. In view: *TimeSeries*.
- tsna** Tools for Temporal Social Network Analysis. Authors: Skye Bender-deMoll [aut, cre], Martina Morris [aut], James Moody [ctb].
- tuber** Client for the YouTube API. Author: Gaurav Sood [aut, cre].
- tumgr** Tumor Growth Rate Analysis. Author: Julia Wilkerson.
- tweet2r** Twitter Collector and Export to 'postGIS'. Author: Pau Aragó.
- ukgasapi** API for UK Gas Market Information. Author: Timothy Wong [aut, cre].
- umx** Helper Functions for Structural Equation Modelling in OpenMx. Author: Timothy C Bates [aut, cre].
- unfoldr** Stereological Unfolding for Spheroidal Particles. Authors: Markus Baaske [aut, cre], Felix Ballani [ctb].
- uniqueAtomMat** Finding Unique or Duplicated Rows or Columns for Atomic Matrices. Author: Long Qu [aut, cre].
- unitedR** Assessment and Evaluation of Formations in United. Author: David Schindler [aut, cre].
- uptimeRobot** Access the UptimeRobot Ping API. Author: Gabriele Baldassarre [aut, cre].
- urlshorteneR** R Wrapper for the Bit.ly, Goo.gl and Is.gd URL Shortening Services. Author: John Malc.
- validate** Data Validation Infrastructure. Authors: Mark van der Loo [cre, aut], Edwin de Jonge [aut], Paul Hsieh [ctb].
- valottery** Results from the Virginia Lottery Draw Games. Author: Clay Ford [cre, aut].
- varhandle** Functions for Robust Variable Handling. Author: Mehrad Mahmoudian [aut, cre].
- varian** Variability Analysis in R. Authors: Joshua F. Wiley [aut, cre], Elkhart Group Limited [cph].
- versions** Query and Install Specific Versions of Packages on CRAN. Author: Nick Golding.
- vertexenum** Vertex Enumeration of Polytopes. Author: Robert Robere.
- vipor** Plot Categorical Data Using Quasirandom Noise and Density Estimates. Authors: Scott Sherrill-Mix, Erik Clarke.
- viridis** Matplotlib Default Color Map. Authors: Simon Garnier [aut, cre], Noam Ross [ctb, cph] (Continuous scale), Bob Rudis [ctb, cph] (Combined scales).
- viridisLite** Default Color Maps from 'matplotlib' (Lite Version). Authors: Simon Garnier [aut, cre], Noam Ross [ctb, cph], Bob Rudis [ctb, cph].
- visNetwork** Network Visualization using 'vis.js' Library. Authors: Almende B.V. [aut, cph] (vis.js library in htmlwidgets/lib), Benoit Thieurmel [aut, cre] (R interface).
- vtreat** Simple Variable Treatment. Authors: John Mount, Nina Zumel.
- wBoot** wBootstrap Routines. Author: Neil A. Weiss.
- wPerm** Permutation Tests. Author: Neil A. Weiss.
- walkr** Random Walks in the Intersection of Hyperplanes and the N-Simplex. Authors: Andy Yao, David Kane.

- warbleR** Streamline Bioacoustic Analysis. Authors: Marcelo Araya-Salas, Grace Smith Vidaurre, Hua Zhong.
- water** Actual Evapotranspiration with Energy Balance Models. Authors: Guillermo Federico Olmedo [aut, cre], Samuel Ortega-Farias [aut], David Fonseca-Luengo [aut], Daniel de la Fuente-Saiz [aut], Fernando Fuentes Peñailillo [aut].
- wbts** Multiple Change-Point Detection for Nonstationary Time Series. Authors: Karolos Korkas and Piotr Fryzlewicz. In view: *TimeSeries*.
- weatherr** Tools for Handling and Scrapping Instant Weather Forecast Feeds. Author: Stan Yip [aut, cre].
- webreadr** Tools for Reading Formatted Access Log Files. Author: Oliver Keyes.
- webuse** Import Stata 'webuse' Datasets. Author: Thomas J. Leeper [aut, cre].
- wec** Weighted Effect Coding. Authors: Rense Nieuwenhuis, Manfred te Grotenhuis, Ben Pelzer, Alexanter Schmidt, Ruben Konig, Rob Eisinga.
- weightTAPSPACK** Weight TAPS Data. Authors: David G. Carlson, Michelle Torres, and Taeyong Park.
- wellknown** Convert Between 'WKT' and 'GeoJSON'. Author: Scott Chamberlain [aut, cre].
- whoami** Username, Full Name, Email Address, 'GitHub' Username of the Current User. Author: Gabor Csardi.
- whoapi** A 'Whoapi' API Client. Author: Oliver Keyes.
- wingui** Advanced Windows Functions. Author: Andrew Redd.
- wiod** World Input Output Database 1995–2011. Author: Bastiaan Quast [aut, cre].
- withr** Run Code With Temporarily Modified Global State. Authors: Jim Hester [aut, cre], Kirill Müller [aut], Hadley Wickham [aut], Winston Chang [aut], RStudio [cph].
- woe** Computes Weight of Evidence and Information Values. Author: Sudarson Mothilal Thoppay.
- wordbankr** Accessing the Wordbank Database. Authors: Mika Braginsky [aut, cre], Daniel Yurovsky [ctb], Michael Frank [ctb].
- wpp2015** World Population Prospects 2015. Authors: Population Division, Department of Economic and Social Affairs, United Nations.
- wqs** Weighted Quantile Sum Regression. Authors: Jenna Czarnota, David Wheeler.
- xergm.common** Common Infrastructure for Extensions of Exponential Random Graph Models. Author: Philip Leifeld [aut, cre].
- xmeta** A Toolbox for Multivariate Meta-Analysis. Authors: Yong Chen, Chuan Hong, Haitao Chu. In view: *MetaAnalysis*.
- xseq** Assessing Functional Impact on Gene Expression of Mutations in Cancer. Authors: Jiarui Ding, Sohrab Shah.
- yakmoR** A Simple Wrapper for the k-Means Library Yakmo. Author: Aydin Demircioglu.
- yummlyr** R Bindings for Yummly API. Author: Roman Tsegelskyi.
- zetadiv** Functions to Compute Compositional Turnover Using Zeta Diversity. Authors: Guillaume Latombe, Melodie A. McGeoch, Cang Hui.

Other changes

The following packages were moved to the Archive: [ABCExtremes](#), [ABCp2](#), [AOfamilies](#), [BHMSMAfMRI](#), [Biograph](#), [Brq](#), [CALINE3](#), [CARramps](#), [CLAG](#), [COP](#), [CSS](#), [Clad-dis](#), [DBFTest](#), [DPw](#), [EMJumpDiffusion](#), [ETAS](#), [FluOMatic](#), [GPlab](#), [HWxtest](#), [LGS](#), [LVQ-Tools](#), [MADAM](#), [MFDA](#), [MGL](#), [MMIX](#), [McParre](#), [Multiclasstesting](#), [OPE](#), [PBC](#), [PERregress](#), [PF](#), [PIGShift](#), [PKfit](#), [RHive](#), [RMeditation](#), [RcmdrPlugin.StatisticalURV](#), [Rhh](#), [SASxport](#), [SE.IGE](#), [SINGLE](#), [SNPMClust](#), [SPMS](#), [Watersheds](#), [WaveCD](#), [WideLM](#), [YourCast](#), [ZeligGAM](#), [ascrda](#), [bayesclust](#), [bdoc](#), [bear](#), [bigrf](#), [biopara](#), [branchLars](#), [clustergas](#), [cmprskQR](#), [cobs99](#), [correlate](#), [datalist](#), [db.r](#), [diskmemoiser](#), [emdatr](#), [epi2loc](#), [esotericR](#), [evora](#), [fuzzyMM](#), [gbs](#), [glassomix](#), [gooJSON](#), [gstudio](#), [h1r](#), [iFes](#), [indicoio](#), [ivivc](#), [Immfit](#), [loe](#), [magma](#), [mixlow](#), [netweavers](#), [ngramr](#), [nlADG](#), [pcrcoal](#), [permGPU](#), [permtest](#), [phom](#), [phyloTop](#), [phylosim](#), [polytomous](#), [predfinitepop](#), [pt](#), [qlspack](#), [qualityTools](#), [rJavax](#), [radiant](#), [rawFasta](#), [reccsim](#), [repra](#), [rgauges](#), [ringbuffer](#), [ringscale](#), [rlme](#), [rpud](#), [rrules](#), [rspear](#), [signal.hsmm](#), [spca](#), [sqlshare](#), [sse](#), [stab](#), [tdm](#), [tslars](#), [varSelectIP](#), [vectoptim](#), [waterfall](#), [weightedKmeans](#), [wombsoft](#).

The following packages were resurrected from the Archive: [AdapEnetClass](#), [BAS](#), [Barnard](#), [DESP](#), [MPCI](#), [MetaPath](#), [NHMSAR](#), [OneArmPhaseTwoStudy](#), [RAHRS](#), [RBerkeley](#), [REGENT](#), [RPPanalyzer](#), [RSpincalc](#), [Rcell](#), [RcmdrPlugin.Export](#), [Rgbrp](#), [Rgnuplot](#), [Rlof](#), [SigTree](#), [ThreeGroups](#), [anoint](#), [cems](#), [cgwtools](#), [colorscience](#), [conicfit](#), [cpm](#), [cusp](#), [delt](#), [dprep](#), [dynpred](#), [edesign](#), [edmr](#), [flowr](#), [geofd](#), [googlePublicData](#), [highriskzone](#), [htmltab](#), [imputeYn](#), [ipw](#), [jackknifeKME](#), [locfdr](#), [muRL](#), [munsellinterpol](#), [nordklimdata1](#), [ocomposition](#), [papeR](#), [parfm](#), [pgnorm](#), [pmc](#), [rbiouml](#), [rknn](#), [samplesize](#), [skellam](#), [spectral.methods](#), [toaster](#), [wccsom](#), [wikipediatrend](#), [xgboost](#), [xml2](#).

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